

Undergraduate Course Descriptions

6/8/93

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
BUS ADM	ACC	110	PRIN OF ACCTG I	3	Introduces the accounting cycle; balance sheet and income statement preparation; accounting for cash, receivables, inventory, property, plant, and equipment; current liabilities.
BUS ADM	ACC	111	PRIN OF ACCTG II	3	A continuation of 110: long-term liabilities, owners equity of partnerships and corporations, and statement of cash flow. Introduces managerial accounting concepts, including manufacturing accounting and budgets, and financial ratio analysis.
BUS ADM	ACC	310	INTERM ACCOUNTING I	3	Intensive study of accounting principles and problems of fairly presenting financial position; measurement of assets, liabilities; preparation of financial statements. Prerequisite: Acc 111.
BUS ADM	ACC	311	INTERM ACCOUNTING II	3	Further study of generally accepted accounting principles; corporate earnings per share, tax allocation, pensions, leases, inflation. Prerequisite: Acc 310.
BUS ADM	ACC	320	ADV ACCOUNTING I	3	Partnerships, accounting; corporate mergers and consolidated financial statements; non-profit accounting; foreign currency transactions, other topics vary. Prerequisite: Acc 311 or permission of instructor.
BUS ADM	ACC	350	COST ACCOUNTING I	3	Budget planning, product costing, break-even and variance analysis, cost behavior, cost allocation. Prerequisite: Acc 111.
BUS ADM	ACC	351	COST ACCOUNTING II	3	More cost behavior, decision models, regression analysis, linear programming applications, capital budgeting, economic order quantity, and ethical considerations. Prerequisite: Acc 350 or permission of instructor.
BUS ADM	ACC	400	AUDITING	3	Systematic process of objectively obtaining and evaluating evidence for the purpose of rendering an opinion and communicating the results to interested users. Prerequisite: Acc 320 or permission of instructor.
BUS ADM	ACC	315	MANAGERIAL ACCOUNTING	3	Examines management strategies to develop budgets and product costs and to control company costs and expenses. Prerequisite: Acc 111.
BUS ADM	ACC	314	AUTOMATED ACCTG SYST	3	An introduction to the development and implementation of an accounting information system. A real commercial system will be analyzed and then used by students to process accounting case studies. Prerequisites: Acc 215 and CIS 104 or 105.
BUS ADM	ACC	390	INTRO FED TAX ACCTG	3	Application of the personal income tax law to taxpayer as an individual and a business proprietor.
SSW/ANTHRO	ANH	101	CULTURAL ANTHRO	3	Introduction to culture as a conceptual model and to the variations in behavior systems found among human societies. Cultural institutions are examined including the processes associated with their development and change.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SSW/ANTHRO	ANH	102	HUMAN ORIG & EVOLUTN	3	Study of the development of man with attention on human variation. Techniques involved in the discovery, reconstruction, and the classification of man are treated. Provides an introduction to physical anthropology including prehistoric archaeology. >
SSW/ANTHRO	ANH	250	WOMEN:CROSS-CUL VIEW	3	Follows the sociological movement of women in society from birth to death. The student will be given a broad perspective of womens traditional roles and how the changing of those roles affects both society and personal relationships. Contemporary womens issues will be viewed in the social context. Readings include case studies, literature, and sociological and anthropological studies. >
SSW/ANTHRO	ANH	301	WORLD CULTURES	3	Comparative study of selected major cultural areas of the world. Institutional patterns characterizing the cultural complexes of Europe and Southwest Asia, South Asia, Southeast Asia, North and South America and Africa south of the Sahara will be examined. Prerequisite: permission of instructor. Dual listed with 501. >
SSW/ANTHRO	ANH	304	CHANGE TOPIC	3	Systematic examination of the cultural system of a major society. Dominant institutional norms, values, and modes of social organization are treated as parts of an integrated system. Prerequisite: Anh 101. >
SSW/ANTHRO	ANH	306	RURAL BELIEF SYSTEMS	3	An investigation of rural values, beliefs, and attitudes and their relation to rural lifestyles. Emphasis is on the family farm and small city complex of Appalachia and involves reading, research, and first-hand experience. Prerequisite: Anh 101 or Soc 101. >
SSW/ANTHRO	ANH	310	ANTHRO FIELD METHODS	3	Examine qualitative field work methods of participation and unstructured interviews. The student is introduced to his/herself as actor in social situations and analyzes campus life (small segments). Prerequisite: Upper division standing, Anh 101, Soc 101 and at least one other upper level anthropology or sociology course. >
SSW/ANTHRO	ANH	350	CHANGE TOPIC	0	Review of a specialty area in anthropoloty or sociology or the study of a problem from an interdisciplinary position. Prerequisite: upper division standing and consent of instructor. >
SSW/ANTHRO	ANH	430	FIELD STUDY	2	Supervised field observation of selected aspect of human group activities in one cultural area. Study may be a broad survey of kinship, education, religion, work and governmental patterns of an intensive study of a single institution. Prerequisite: Anh 101 or Soc 101 and/or permission of instructor. >
SSW/ANTHRO	ANH	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
ART	ARE	288	HST&PHIL ED & ART ED	3	The purpose of this course is to acquaint the student with social, historical, and philosophical developments in education and art education. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ART	ARE	290	ART ED IN ELEM TCHG	3	Pre-student teaching experience in which each student prepares lessons and teaches children of pre-school age through the fifth and sixth grades. Activities include field trips, observations, and participation in nearby public schools. Program takes place on Saturday morning.
ART	ARE	343	ARTS&CRAFTS IN SPED	3	Creative work in a variety of activities with arts and crafts materials; particular emphasis on the needs of special education classes.
ART	ARE	392	TCHG ART-ELEM GRADES	3	Philosophy and principles of art education in the elementary school curriculum; experience in the development of self-expression through a variety of public school art materials and activities as a basis for understanding and evaluating childrens art work.
ART	ARE	400	STUDENT TEACHING	**	(By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the departmental supervisor. Prerequisite: 2.5 QPA.
ART	ARE	393	ART IN SECONDARY SCH	3	Pre-student teaching situation based on classroom problems that occur in an actual teaching situation in the Mansfield junior/senior high school. Problems of an individual in the classroom provide a personalized approach to problems and their solutions. Emphasis is placed upon application, observation, and evaluation of teaching as related to the adolescent in the junior/senior high school. Prerequisite: Are 290.
ART	ARE	394	CURRIC DEV IN ART ED	2	Investigation of the concepts, attitudes, and values of art theory and practice as related to curriculum; a study of classroom problems and procedures in various teaching situations.
ART	ARE	444	ART&REC HANDCPD CHLD	6	Three-week workshop with instruction in and practical application of art and recreation for the handicapped child in connection with the Easter Seal Society of Pennsylvania. First part on campus for several days in a classroom situation. Second part in an Easter Seal Society camp for the two-week session, living, working, and playing with young handicapped children 24 hours a day under the direction and supervision of both camp and college professionals.
ART	ARH	101	INTRODUCTION TO ART	3	An approach to the dominant movements and ideas of the Western World as they evolved in visual arts, from the cave art origins to the 20th century systems.
ART	ARH	102	SURVEY OF ART	3	Intercultural and interdisciplinary approach to dominant movements, ideas as they evolved in visual arts. Philosophic commonality of purpose which becomes intertwined with man's record of history.

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ART	ARH	220	PRIMITIVE ART	3	The study of prehistoric and primitive art from the Paleolithic period: Africa, Mexico, Europe, the Americas, Asia, Australia, and the South Seas. Prerequisite: Arh 101 or 102.
ART	ARH	221	ANCIENT&MEDIEVAL ART	3	Comprehensive study of architecture, sculpture, painting and minor arts from the prehistoric through the gothic period; emphasis on aesthetic values and historical implications, iconographic, and symbolic significances. Prerequisite: Arh 101 or 102.
ART	ARH	225	HIST OF MODERN ART	3	Comprehensive study of the development of Modern Art from Nineteenth Century Neo-Classicism through contemporary movements. Prerequisite: Arh 101 or 102.
ART	ARH	226	ORIENTAL ART	3	Study of art in India, China, and Japan in the areas of painting, sculpture, architecture, pottery, and the minor arts. Trace influences central to the development and spread of important styles and the relationship of art to the classics of Oriental aesthetics.
ART	ARH	229	HST AFRICAN-AMER ART	3	Survey of early African art to contemporary African-American art, appraise the past and present performance of African-American artists and their contributions to American art history.
ART	ARH	230	HST OF AMERICAN ART	3	Comprehensive study of the heritage of American art from the Limners and Artisans of colonial times through the 20th century in painting, architecture, and sculpture; emphasizing movements, trends, and contributions by significant artists, architects, and sculptors. Prerequisite: Arh 101 or 102.
ART	ARH	401	CULT ORIGINS OF ART	0	A travel-study seminar abroad visiting various countries around the world. The course is planned as an intensive study of the humanities and cultures from which various art styles emerge. Lectures will be conducted throughout the tour by the director. Prerequisite: Arh 101, 102 or permission of instructor. Dual listed with 501.
ART	ARH	497	INDEPENDENT STUDY	0	(see description in section on academic policies.)
ART	ARH	322	ART OF RENAISSANCE	3	Comprehensive study of architecture and painting in Italy, Flanders, Holland, Germany, England, France, and Spain during the fifteenth and sixteenth centuries. Prerequisite: Arh 101 or 102 or permission of instructor.
ART	ARH	327	HISTORY OF PRINTS	3	The study of the history of printmaking and the significant influences of Eastern and Western cultures on the graphic processes. Prerequisite: Arh 101 or 102 or permission of instructor.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ART	ARH	328	HIST OF ARCHITECTURE	3	Study of architecture, styles and methods of construction, from the earliest civilizations to the present. Analyze the outstanding contributions in architecture of the various cultures with emphasis on further development and influences, citing important examples and their architects. Prerequisite: Arh 101 or 102 or permission of instructor.
ART	ARH	323	BAROQUE & ROCOCO ART	3	A comprehensive study of painting, sculpture, and architecture from 1600 to 1750 in Italy, Flanders, Germany, Austria, Holland, Spain, France and England. Prerequisite: Arh 101, 102 or permission of instructor.
ART	ARH	324	NATIVE ARTS OF AMER	3	A survey of the native arts of North, Central, and South America during the pre-Columbian and historic periods. Painting, sculpture, architecture, and crafts will be examined.
ART	ARH	407	EMPIRES THROUGH ART	3	Explores the use of art and architecture of various empires as images of power and political statement. The Roman, Byzantine, Holy Roman, Ottoman, Russian, and British empires will be examined. Prerequisite: Arh 101, 102 or permission of instructor. Dual listed with 507.
ART	ARH	408	ART&MYTH ANC GREECE	3	Explores the relationship between art and mythology in ancient Greece from the Bronze Age through the Classical and Hellenistic periods. British empires will be examined. Prerequisite: Arh 101, 102 or permission of instructor. Dual listed with 508.
ART	ARH	409	WOMEN IN ART	3	A study of the accomplishments and contributions of women in art and architecture from antiquity to the twentieth century. Women as subjects in art will also be examined with emphasis on the cultural and artistic milieu in which they are represented. Prerequisite: Arh 101, 102 or permission of instructor. Dual listed with 509.
ART	ART	201	PAINTING	3	Introduction to the methods, techniques, and approaches of the painter. Emphasis is placed on composition, application, and involvement in creative self-expression. Stress is placed upon the understanding and use of the media for solving various problems of representation. Dual listed with 511.
ART	ART	210	DRAWING	3	To build those skills and attitudes necessary for the remainder of the program. Introduction to the two and three dimensional aspects of drawing and develop personal power of expression. Stimulate creative thinking, develop a sensitivity to the art elements, sharpen impressions, and the visual memory. Dual listed with 510.
ART	ART	231	PRINTMAKING	3	Introduction to the printmaking processes of linocut, woodcut, lithography, serigraphy, etching, intaglio, and drypoint with emphasis on their use for creative expression. Dual listed with 514.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ART	ART	241	COLOR AND DESIGN	3	Introductory course to design. Emphasis is placed on the creative use of color and basic elements of design emphasizing their function and relationships through discussion and assigned problems. Introduction to types of harmony, sequence and balance while applying methods of design and representation through the use of various media. >
ART	ART	251	JEWELRY	3	Study of two and three dimensional design concepts, with emphasis on individual solutions in the medium of metal. Both precious and common materials will be used. Traditional techniques of jewelry making will be explored. Dual listed with 516. >
ART	ART	261	WATERBASE MEDIA	3	Investigation into the waterbase media (transparent, gouache, acrylic polymer) with the intent of establishing a broad base of understanding needed to accomplish personal goals. Dual listed with 513. >
ART	ART	271	CERAMICS	3	Study of hand and wheel methods of forming. Introduction to the principles of glaze formulation, kiln stacking, and firing. Dual listed with 515. >
ART	ART	281	SCULPTURE	3	Exploration of three-dimensional design as related to sculpture. Basic techniques of stone and wood carving will be explored in addition to various methods of material build-ups (wood, plaster, plexiglas, metal, etc). Dual listed with 519. >
ART	ART	295	CRAFTS	3	Purpose is to become more receptive to three-dimensional media and materials. Opportunity to explore various media, to develop an understanding of crafts. Basic design properties of wood, paper, clay, metal, and plastics. Dual listed with 512. >
ART	ART	298	PUPPETRY	3	Devoted to the production and exploration of a variety of puppets, both traditional and contemporary. Concentration on creative imagery to develop characterization, special emphasis on the utilization of puppets in free play, impromptu, scripted productions, stage, and special performances. >
ART	ART	300	VIS STD AESTHE EXPER	3	Philosophic theories of art, aesthetic experience, principles and criticism in the nature and comprehension of the character of arts; the artist and his/her relationship to life. >
ART	ART	302	ADVANCED PAINTING	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 201. >
ART	ART	311	ADVANCED DRAWING	0	Direction of the course of study is determined by the subject and instructor. Prerequisite: Art 210. >
ART	ART	332	ADVANCED PRINTMAKING	0	Direction of the course of study is determined by the subject and instructor. Prerequisite: Art 231. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ART	ART	342	ADVRTSG/DESGN&LETTER	3	Introduction to advertising. Comprehensive survey of basic principles and practices in advertising, their relation to economy, society, and system of mass communication. Psychological and creative factors involved in advertising, design, research, media, and campaign.
ART	ART	345	FIBERS	3	Creative application of the principles and elements of design and color theory to fibers and fabrics. Develop skills in textile techniques and understanding of the functional and aesthetic possibilities of fibers and fabrics. Techniques include: weaving, hooking, rya knotting, crochet, knitting, macrame, stitchery, tie dye, batik, block print, dye painting, spinning, quilting, basketry. Dual listed with 517.
ART	ART	346	FIBERS WORKSHOP	3	Discuss and explore the principles of fabric construction as applied to practical uses, the functional and aesthetic uses of fibers, color and design in textiles and how to design specifically for textile techniques, sources for materials and equipment, including the building of simple equipment.
ART	ART	347	WEAVING & SPINNING	0	Exploration of spinning, weaving, the basic structure of fiber and fabric; starting with basic skills and advancing to drafting and weaving your own fabric.
ART	ART	352	ADVANCED JEWELRY	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 251.
ART	ART	362	ADV WATERBASE MEDIA	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 261.
ART	ART	372	ADVANCED CERAMICS	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 271.
ART	ART	382	ADVANCED SCULPTURE	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 281.
ART	ART	396	ADVANCED CRAFTS	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 295.
ART	ART	403	SEMINAR	1	Will provide the art student with the opportunity to exchange ideas, to enhance critical dialectic, and to participate in activities relevant to the professional artist. The activities of the course will assist the student in developing his/her portfolio and exhibition skills.
ART	ART	365	COMPUTER ART	0	Introduction to the methods, techniques and approaches of the computer for graphic application. To provide an effective, workable knowledge of computer graphic design that can be applied to the area of creative expression and teaching.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ART	ART	404	CHANGE TOPIC	0	Offered to those persons interested in extending their scope or gaining depth in specific academic areas related to art and/or education. Since needs and conditions change with each student, the requirements and restrictions are determined by and arranged with the chairperson. >
ART	ART	445	ADVANCED FIBERS	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 345. >
ART	ART	489	INTERNSHIP	3	A practical experience in a selected field of artistic endeavor designed to meet the students needs. >
ART	ART	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies). >
ART	ART	498	ADVANCED PUPPETRY	0	Direction of the course of study is determined by the student and instructor. Prerequisite: Art 298, similar background, or permission of instructor. >
ART	ART	465	ADV COMPUTER ART	0	Introduction to the methods, techniques and approaches of the computer for graphic application. To provide an effective, workable knowledge of computer graphic design that can be applied to the area of creative expression and teaching. Prerequisite: Art 365. >
PHYSICS	AST	105	EXPLOR OF SOLAR SYS	3	A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the solar system. >
PHYSICS	AST	105L	SOLAR SYSTEM LAB	0	the exploration of the solar system lab >
PHYSICS	AST	106	ONE POSSIBLE UNIV	3	A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the universe. >
PHYSICS	AST	108	OBSERVING AUTUMN SKY	1	This module concentrates on the constellations, stars, and other celestial objects found in the evening sky during autumn. Students also learn pertinent historical, legendary, and astronomical facts about them. >
PHYSICS	AST	109	OBSERVING WINTER SKY	1	This module concentrates on the constellations, stars, and other celestial objects found in the evening sky during winter. Students also learn pertinent historical, legendary, and astronomical facts about them. >
PHYSICS	AST	110	OBSERVING SPRING SKY	1	This module concentrates on the constellations, stars, and other celestial objects found in the evening sky during the spring. Students also learn pertinent historical, legendary, and astronomical facts about them. >
PHYSICS	AST	111	OBSERVING SUMMER SKY	1	This module concentrates on the constellations, stars, and other celestial objects found in the evening sky during the summer. Students also learn pertinent historical, legendary, and astronomical facts about them. >

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PHYSICS	AST	112	AEROSPACE	3	Relevance of space exploration to society will be integrated into course content. The laboratory will acquaint the student with propulsion systems; problems of guidance, navigation, radiation, and aerodynamics; and the physiological and psychological reactions to space travel. >
PHYSICS	AST	113	ORIGINS OF LIFE	1	The various mythological and scientifically-based theories about the origin of life are presented for critical study. The various experimental programs currently underway to attempt the generation of life are discussed. >
PHYSICS	AST	405	PLANETARIUM OPERATNS	1	The primary aim of this course is to acquaint the participants with both the extent and limitations of the facility as an educational tool for school children as well as the general public. Prerequisite: Undergraduates/six credits of astronomy or three credits and permission of instructor; Graduates/ permission of instructor. >
PHYSICS	AST	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies). >
BIOLOGY	BFC	213	FISH CULTURE I	3	The technology of controlled husbandry of fish in flowing water. Major emphasis on solving problems relative to the intensive aquaculture. >
BIOLOGY	BFC	214	FISH CULTURE II	3	The technology of controlled husbandry of fish in standing water. Major emphasis on the science of extensive aquaculture. >
BIOLOGY	BFC	404	SEMINAR	1	Students are exposed to the fisheries profession through seminars from guest lecturers. >
BIOLOGY	BFC	317	FISH MANAGEMENT	3	A consideration of how fish populations become structured and the effects of various rates of exploitation upon these structures. A practical explanation of relative efficiencies of different fish management practices on maintaining fishery yields desirable to anglers is emphasized. >
BIOLOGY	BFC	315	FISH PATHOLOGY	3	A consideration of the diagnosis and treatment of diseases commonly found in hatchery fish. Diseases of bacterial, viral, parasitic, and environmental origin are studied together with recommended treatment for each. >
BIOLOGY	BFC	315L	FISH PATHOLOGY LAB	0	Fish pathology lab >
BIOLOGY	BFC	318	LIT REV&RPT FISH CUL	1	A study of scientific literature of fish culture, with special emphasis on its organization and retrieval and the writing of reports. >
BIOLOGY	BIO	101	MAN & BIO WORLD	4	An introduction to biological processes; study and discussion of these processes together with ecological aspects of life. The laboratory stresses demonstration and analysis of biological processes. >
BIOLOGY	BIO	101L	MAN & BIO WORLD LAB	0	man and the biological world laboratory. >

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BIOLOGY	BIO	102	CONTEMP BIO PROBLEMS	3	There is no fixed syllabus. Topics are current and usually changed for each semester. Guest lecturers will be given time to present their specialities. Prerequisite: Bio 101. >
BIOLOGY	BIO	103	HUMAN ANATOMY	4	A structural approach to the human organ systems. >
BIOLOGY	BIO	103L	HUMAN ANATOMY LAB	0	human anatomy lab >
BIOLOGY	BIO	104	HUMAN PHYSIOLOGY	3	A functional approach to the human organ systems. >
BIOLOGY	BIO	104L	HUMAN PHYSIOLOGY LAB	0	human physiology lab >
BIOLOGY	BIO	111	INTRO CELL BIOLOGY	4	A study of the cellular level of life with emphasis on cellular structures and their relationship to movement, function, and energy transformation. Cellular genetics and the cellular approach to medicine are also discussed. >
BIOLOGY	BIO	111L	INTRO CELL BIO LAB	0	intro cell bio lab >
BIOLOGY	BIO	121	HUMAN ANAT & PHYS I	4	This course presents an integrated approach to the study of the anatomy and physiology of the various organ systems of the human body. >
BIOLOGY	BIO	121L	HUM ANAT&PHYS I LAB	0	human anatomy and physiology I lab >
BIOLOGY	BIO	122	HUMAN ANAT & PHYS II	4	A continuation of Bio 121. This completes an integrated approach to the study of the anatomy and physiology of the various organ systems of the human body. >
BIOLOGY	BIO	122L	HUM ANAT&PHYS II LAB	0	human anatomy and physiology II lab >
BIOLOGY	BIO	210	ZOOLOGY	4	An evolutionary approach to the study of the animal kingdom, with attention given to the development of organ systems throughout the several phyla of invertebrates and vertebrates. Function, correlated with structure and taxonomic features, is emphasized. Additional evidence for evolution is included through an introduction to genetics, embryology, and ecology. >
BIOLOGY	BIO	210L	ZOOLOGY LAB	0	zoology lab >
BIOLOGY	BIO	220	BOTANY	4	Study of plant structures and function, development, growth, diversity, and evolution. Prerequisite: Bio 101 or 111. >
BIOLOGY	BIO	220L	BOTANY LAB	0	botany lab >
BIOLOGY	BIO	222	HORTICULTURE	3	A course designed for the study of garden and interior plants. Lecture and laboratory sessions will provide information on soils, lighting, watering, and other cultural requirements of plants as well as the methods and techniques for growing and maintaining indoor and outdoor plants. >

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BIOLOGY	BIO	222L	HORTICULTURE LAB	0	horticulture lab >
BIOLOGY	BIO	230	FIELD ZOOLOGY	3	Taxonomy of local fauna; field collections and laboratory studies. Prerequisite: Bio 101, 111 or 210. >
BIOLOGY	BIO	230L	FIELD ZOOLOGY LAB	0	field zoology lab >
BIOLOGY	BIO	240	LOCAL FLORA	3	Taxonomic and ecological study of local flowering and non-flowering plants. Prerequisite: Bio 101 or 220. >
BIOLOGY	BIO	240L	LOCAL FLORA LAB	0	local flora lab >
BIOLOGY	BIO	250	MARINE BIOLOGY	3	Includes studies basic to the biology and ecology of marine organisms. Practical applications such as biological/ecological sampling techniques and species identification are covered in the laboratory and on a coastal field trip. Prerequisite: Permission of the instructor. Bio 310 recommended. >
BIOLOGY	BIO	250L	MARINE BIOLOGY LAB	0	marine biology lab >
BIOLOGY	BIO	251	TROPICAL MARINE BIO	1	Tropical marine communities are among the richest and biologically most diverse in the oceanic environment. This course is designed to provide insight into the biology/ecology of the mangrove, inter-tidal, and coral reef ecosystems. A week-long visit to the tropics which includes snorkeling and diving provides students with firsthand experience. Prerequisite: permission of instructor. >
BIOLOGY	BIO	260	FIELD METH ENVIR BIO	3	A study of the field methods employed in measuring the biological qualities of the environment. Techniques applicable to surveys of the major aquatic and terrestrial habitats are taught through field experience. Analysis of data obtained and consideration of its significance is an integral part of the course. Prerequisite: Bio 101 or equivalent. Bio 310 recommended. >
BIOLOGY	BIO	260L	FLD MTDS ENV BIO LAB	0	field methods in environmental biology lab >
BIOLOGY	BIO	309	EPIDEMIOLOGY	3	The study of distribution and determinants of disease and injury in populations. Provides an introduction into community health and medical problems and services. Problem solving, case-control studies, and statistical analysis are emphasized. Prerequisite: permission of instructor. >
BIOLOGY	BIO	310	ECOLOGY	3	A study of the fundamental ecological principles of plants and animals in their environment. Prerequisite: Bio 101 or permission of instructor. >
BIOLOGY	BIO	310L	ECOLOGY LAB	0	ecology lab >

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BIOLOGY	BIO	325	ENTOMOLOGY	3	Survey of the classification, structure, physiology, biology and economic importance of insects. An introduction to the study of insects as a major segment of the biological community. Laboratory exercises on anatomy and practice in the techniques of insect identification. Prerequisite: Bio 210 or permission of instructor. >
BIOLOGY	BIO	325L	ENTOMOLOGY LAB	0	entomology lab >
BIOLOGY	BIO	330	PLANT PHYSIOLOGY	3	A course designed to develop an understanding of the chemical and physical processes occurring in plants including respiration, photosynthesis, hormonal activity, osmosis, transpiration, mineral absorption and translocation. The laboratory work will involve analysis of these functions. Prerequisite: Bio 111 and 220 or permission of instructor. >
BIOLOGY	BIO	330L	PLANT PHYSIOLOGY LAB	0	plant physiology lab >
BIOLOGY	BIO	331	VERTEBRATE ANATOMY	3	A history of vertebrates and comparative systems through the major vertebrate groups correlating their historical development. Prerequisite: Bio 101 or 111. >
BIOLOGY	BIO	331L	VERTEBRATE ANAT LAB	0	vertebrate anatomy lab >
BIOLOGY	BIO	332	PHYSIOLOGY	4	A systematic study of the life processes and functions of the animal body with particular emphasis on the mammalian vertebrate. Prerequisite: Bio 101 or 111. >
BIOLOGY	BIO	332L	PHYSIOLOGY LAB	0	physiology lab >
BIOLOGY	BIO	340	GENETICS	3	An introductory course with emphasis on basic principles and concepts of genetics concerning chromosomes, DNA, RNA, linkage, etc. An initial discussion will cover classical genetics followed by an in-depth study of biochemical genetics. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as acquaint the student with some of the organisms used in genetic research. Prerequisite: Bio 111 or permission of instructor. >
BIOLOGY	BIO	340L	GENETICS LAB	0	genetics lab >
BIOLOGY	BIO	343	FOOD MICROBIOLOGY	4	Basic microbiology of bacteria, yeasts, and molds with emphasis as to preparation and preservation of foods, water and waste control, disease mechanisms, and special food products. This course is a required course for transcript evaluation prior to taking the registry exam by the american dietetic association. Prerequisite: junior standing. >
BIOLOGY	BIO	343L	FOOD MICROBIO LAB	0	food microbiology lab >

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BIOLOGY	BIO	345 DEVELOPMENTAL BIOLOGY	3	A comparative survey of the development of representative animals from several phyla with emphasis on gamete formation, fertilization, embryonic development, organogenesis, growth, and biological aging. The laboratory combines examples of live plant and animal development with prepared slides of frog and chick embryology. Prerequisite: Bio 111 and 210 or permission of instructor.
BIOLOGY	BIO	345L DEVELOPMENTAL BIO LAB	0	> developmental biology laboratory
BIOLOGY	BIO	351 ANIMAL HISTOL/MICTEC	3	A systematic study of the microanatomy of the vertebrate body starting with cells and tissues and working through the complete organ systems. Prerequisite: Bio 101 or 111.
BIOLOGY	BIO	351L ANIMAL HST/MICRO LAB	0	> animal hist/micr lab
BIOLOGY	BIO	355 MICROBIOLOGY	3	An introductory course with an emphasis on the basic principles and concepts of microbiology concerning anatomy, classification, physiology and practical uses of micro-organisms. The laboratory section of this course will help the student develop aseptic technique. Prerequisite: Bio 111 or permission of instructor.
BIOLOGY	BIO	355L MICROBIOLOGY LAB	0	> microbiology lab
BIOLOGY	BIO	360 ICHTHYOLOGY	3	A laboratory and field study of the fishes inhabiting the lakes and rivers of this area constitute the major portion of this course. Collection, measurement and chemical data as related to fish populations, management, and meristic characters will be collected and analyzed. Prerequisite: Bio 210, 310, 331 or permission of instructor.
BIOLOGY	BIO	360L ICHTHYOLOGY LAB	0	> ichthyology lab
BIOLOGY	BIO	362 LIMNOLOGY	3	Deals with basic concepts in the study of inland waters. Focus on biological, chemical, physical, and geological factors which determine biological productivity in natural waters. Prerequisite: Bio 111 or permission of instructor.
BIOLOGY	BIO	362L LIMNOLOGY LAB	0	> limnology lab
BIOLOGY	BIO	380 IMMUNOLOGY	3	The study of antigens and antibodies encompassing the fields of the immune response, autoimmunity, allergic reactions, tumor immunology, tissue graft and transplant biology.
BIOLOGY	BIO	380L IMMUNOLOGY LAB	0	> immunology lab
BIOLOGY	BIO	401 BIostat & EXPER DSGN	3	Presents to science students a description of the processes of experimental design, selection of appropriate statistical tests to analyze experimental data, and performance of these tests using current software. Prerequisite: Ma 105 or permission of instructor.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
BIOLOGY	BIO	404	SEMINAR	1	Study and research projects involving investigation of recent literature in the field of biology; preparation of seminar papers on assigned problems.
BIOLOGY	BIO	444	MOLECULAR BIOLOGY	3	An examination of the principles and techniques underlying the chemical and physical aspects of living systems. A study of the structure and activities of biological molecules which, properly integrated, constitute all forms of life. The laboratories will demonstrate techniques of the activities, separation and analysis of these molecule forms. Prerequisite: Bio 111.
BIOLOGY	BIO	444L	MOLECULAR BIO LAB	0	molecular biology lab
BIOLOGY	BIO	450	INTERNSHIP	0	The biology internship gives students the opportunity to apply knowledge and skills in the biological sciences while working with a public or private agency involved in aspects of applied biology. The practical experience thus acquired both supplements and reinforces the more academic aspects of biology stressed in the classroom.
BIOLOGY	BIO	460	AQUACULTURE RESEARCH	0	A special research project is initiated by the student to increase his/her expertise in investigating a scientific problem and reporting the results in the form of a scientific paper. The research is conducted under the guidance of a faculty member who has special expertise in the subject area. Prerequisite: permission of instructor.
BIOLOGY	BIO	461	MGT OF SMALL IMPOUND	3	Theory, practice, and demonstration of managing farm ponds for optimal sport fishing. Prerequisite: six credits of biology and permission of instructor. Dual listed with 561.
BIOLOGY	BIO	461L	MGT SMALL IMPND LAB	0	Management of small impoundments laboratory.
BIOLOGY	BIO	462	MGT STRM & LG IMPOUND	3	Theory, practice, and demonstration of managing streams, rivers, natural lakes, and large impoundments for optimal sport fishing. Prerequisite: six credits of biology and permission of instructor. Dual listed with 562.
BIOLOGY	BIO	462L	MGT STRM&IMPND LAB	0	Management of streams and large impoundments laboratory.
BIOLOGY	BIO	465	SEMINAR ENVIRON SCI	1	An upper level seminar that integrates and applies concepts and skills taught in the basic courses of the environmental science emphasis.
BIOLOGY	BIO	482	CELL PHYSIOLOGY	3	A study of a specialized field of cell biology which emphasizes phenomena dealing with the nature of the cell membrane and its transport activities, the reaction of cells to changes in environment, the mechanism of cell excitability and contraction, and other manifestations of cellular functioning such as nutrition, growth and secretion.
BIOLOGY	BIO	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.)

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
BUS ADM	BUS	130	INTRO BUS & MGMT	3	Studies an overview of the broad concept of business functions. Provides a foundation for understanding the relationship between essential activities of business. Helps students to determine and pursue their areas of interest and aptitude.
BUS ADM	BUS	150	WOMEN IN MANAGEMENT	3	This course examines management structure and practice in relation to women; their goals, expectations, attitudes, and skills. The difficulties women encounter in being successful in management will be analyzed and strategies which both men and women can use in changing the situation will be discussed. The course will emphasize case studies.
BUS ADM	BUS	160	SMALL BUS MANAGEMENT	3	Emphasizes aspects of management unique to small firms. Examines the characteristics of entrepreneurs and the process of strategic planning for small firms.
BUS ADM	BUS	230	MANAGEMENT PRIN	3	Acquaints the student with the functions and internal structure of modern business. Students will learn the techniques and systems employed by management to run an efficient organization.
BUS ADM	BUS	330	MARKETING	3	Introduces the nature of marketing activities, consumer behavior and motivation. Focuses on an individual firm managing its marketing efforts in relation to market forces and marketing opportunities. Emphasis on development of product, price, promotion, and distribution policies in order to achieve planned marketing programs. Prerequisite: Bus 130, Eco 101 and 102.
BUS ADM	BUS	332	PROMOTION IN MKTG	3	Examines the promotion functions of the marketing program. It also helps students to analyze marketing communication opportunities, planning, and execution of the marketing program. Prerequisite: Bus 130 and 330.
BUS ADM	BUS	333	INTRNTL FIN MGT&ECO	3	Designed to study the mechanism of international business finance. Topics covered include the study of foreign exchange market, Eurodollar market, inflow and outflow of capital to and from the U.S., the effect of U.S. interest rate on imports and exports, and foreign exchange risk. Prerequisite: Acc 111, Eco 101, 102 and Ma 105.
BUS ADM	BUS	334	MARKETING RESEARCH	3	Provides an indepth examination of market research tools and techniques. Emphasis is on effectiveness of the total efforts in an atmosphere of tight budgetary and fiscal control. Also reviews successful efforts and stresses on practical application of theory. Prerequisite: Bus 130, 330, MA 105 or permission of instructor.
BUS ADM	BUS	301	INTRO TO FINANCE	3	Examines basic concepts and techniques for identifying and solving elementary financial management problems. Topics include compound interest and time value of money, financial statement analysis, working capital management, cash flow analysis and capital budgeting, short-term financing, and stockholder equity valuation. Prerequisite: Eco 101 and Ma 105.

DEPARTMENT	PREFIX	COURSE NUMBER TITLE	CR	COURSE DESCRIPTION
BUS ADM	BUS	302 MANGRL DECISION MKG	3	Examines decision making as a multi-dimensional process. A variety of models and frameworks, quantitative and qualitative, are offered as a rational approach to managerial decisions. Prerequisite: Bus 230. >
BUS ADM	BUS	345 GOV & BUS IN SOCIETY	3	Examines the idea of "social responsibility" of business. Examines the political and economic framework that affects legislation and business strategy. Considers the value judgments which influence policy makers. >
BUS ADM	BUS	370 SALESMANSHIP	3	Provides students with entry level skills for a position in sales. Recognizes the necessary skills and characteristics that contribute toward greater sales effectiveness. Stresses the importance of establishing realistic goals and objectives; to manage your time and selling activities more effectively. The primary objective, however, is to gain an understanding of personal selling as a major function within the marketing and promotional mix of a firm. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	415 MARKETING MANAGEMENT	3	Studies an in-depth examination of contemporary micro and macro marketing systems. Examines functional marketing decisions through the application of behavioral concepts, quantitative tools, and systems theory. Also presents advanced marketing techniques used by marketing organizations. Looks at individual behavior in order to evaluate the buying behavior of consumers with the objective of tailoring marketing strategies to meet consumers' needs and wants. Prerequisite: Bus 130, 330, CIS 480, junior standing or permission of instructor. >
BUS ADM	BUS	420 MKTG NON-PROFIT ORG	3	Provides students the opportunity to enhance marketing knowledge through related elective courses. Topics include: 1) Marketing for Non-Profit Organizations, 2) Marketing Channels of Distribution, 3) International Marketing, 4) Industrial Marketing, 5) Sales Force Management, and 6) Current Marketing Problems. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	402 CORPORATE FINANCE	3	Focus on how individuals, financial institutions, and corporations make investment and financing decisions over multiple time period in an uncertain environment. Topics include theory of choice, efficient capital markets, CAPM and APT, capital budgeting under uncertainty, capital structure theories and policies, dividend policy, mergers and restructuring, and elements of international financial management. Prerequisite: Bus 301, CIS 103, Eco 102, Ma 105 and 111 OR MA 140. >
BUS ADM	BUS	410 BUSINESS LAW I	3	Introduces the legal environment of business and its role in modern society. Topics include the formation of contracts, sales, negotiable instruments, bank deposits and collections, secured transactions, and business organization. Emphasizes social and ethical considerations, terminology, fundamental legal principles, and analysis. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
BUS ADM	BUS	421	MARKETING CHANNELS	3	Provides students the opportunity to enhance marketing knowledge through related elective courses. Topics include: 1) Marketing for Non-Profit Organizations, 2) Marketing Channels of Distribution, 3) International Marketing, 4) Industrial Marketing, 5) Sales Force Management, and 6) Current Marketing Problems. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	422	INTERNATIONAL MKTG	3	Examines the application of marketing concepts and strategies in the global markets. Emphasis is on adjusting and adapting a marketing program to foreign markets. Provides an understanding of differences between markets in different countries, its politics, legal, culture, trade practices, geography, and commercial policies. Studies export and import procedures and practices. Prerequisite: Bus 130 and 330 or permission of instructor. changed 5/93 >
BUS ADM	BUS	423	INDUSTRIAL MARKETING	3	Provides students the opportunity to enhance marketing knowledge through related elective courses. Topics include: 1) Marketing for Non-Profit Organizations, 2) Marketing Channels of Distribution, 3) International Marketing, 4) Industrial Marketing, 5) Sales Force Management, and 6) Current Marketing Problems. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	424	SALES FORCE MGMT	3	Provides students the opportunity to enhance marketing knowledge through related elective courses. Topics include: 1) Marketing for Non-Profit Organizations, 2) Marketing Channels of Distribution, 3) International Marketing, 4) Industrial Marketing, 5) Sales Force Management, and 6) Current Marketing Problems. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	425	CURRENT MKTG PROBS	3	Provides students the opportunity to enhance marketing knowledge through related elective courses. Topics include: 1) Marketing for Non-Profit Organizations, 2) Marketing Channels of Distribution, 3) International Marketing, 4) Industrial Marketing, 5) Sales Force Management, and 6) Current Marketing Problems. Prerequisite: Bus 130, 330 or permission of instructor. >
BUS ADM	BUS	411	BUSINESS LAW II	3	Continued study of legal principles including agency, property, Federal Securities law, and bankruptcy. Emphasis is placed on the case law approach and problem solving. Prerequisite: Bus 410. >
BUS ADM	BUS	435	INVESTMENT THEORY	3	Introduction to financial policy with special emphasis on the practical application of risk-return theory. Investment decisions by individuals and firms, in stocks and bonds and other securities, made on the basis of incomplete information in an uncertain environment is covered. Prerequisite: Bus 340, Ma 105, 109, 111 or permission of instructor. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
BUS ADM	BUS	450	ORGANIZATN INTERNSHP	0	Supervised and evaluated participation in the regular activities of a business, government, agency, or appropriate organization. In consultation with the supervising faculty member, the student is expected to prepare a comprehensive final report relating to the work accomplished during the field experience. >
BUS ADM	BUS	490	BUSINESS POLICY	3	Studies business problems and the formulation of policies to meet these problems from a general management viewpoint. Integrates knowledge from other courses to develop skills in policy formulation. Emphasizes long-range goals and administrative action. Case studies and simulation used. Prerequisite: Senior standing. >
BUS ADM	BUS	451	BEHAV APPROACH MGMT	3	An examination of theories, concepts, and research findings emerging from the various disciplines which study individual and group behavior within organizational systems. Prerequisite: junior or senior standing. >
BUS ADM	BUS	441	FINANCL STATMNT ANLY	3	Analyze financial statements issued by public held organizations. Emphasis is on the use of financial statements by creditors, investors, and those who are external to the enterprises. Topics include cash flow analysis, standards of financial analysis, and off-balance sheet financing. Prerequisite: Acc 111, Bus 301 and Ma 105. >
BUS ADM	BUS	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
BUS ADM	BUS	349	QUANT BUS ANALYSIS	3	Provides a systematic application of modern quantitative tools and techniques in practical situations. Topics include hypothesis testing, probability distribution, simple and multiple regression, and time series analysis. Prerequisite: Ma 105. >
BUS ADM	BUS	321	ENVRN & MGT INTL BUS	3	Provides a managerial view point of the dynamics of international business. Topics covered include history and scope of international business, international trade theory, foreign direct investment, governmental influences on trade and regional economic integration, and socio-cultural and legal factors on MNCs. Prerequisite: Bus 230, Econ 101 and 102. >
BUS ADM	BUS	403	BUS & AM FOREIGN POL	3	Provides a systematic look at the U. S. Foreign policy on international business. Topics covered include economic, social and political objectives of foreign policy, the impact of foreign policy on East-West trade relations, emerging market economies in eastern Europe and U.S. foreign policy, NAFTA, GATT, GSP and U.S. multinationals. Prerequisite: Eco 101, 102 and Bus 230. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
BUS ADM	BUS	404	INTL REL ASIA/LAT AM	3	Examines the theories of international relations in the emerging industrial countries of Asia and Latin America. Will analyze U.S. and European competition in the area. Regional conflicts between nations in these regions and means of resolving conflicts in the light of changing world politics will be discussed. Prerequisite: Eco 101, 102 and PSc 210. >
CHEMISTRY	CHM	101	INTRO CHEMISTRY	4	A treatment of fundamental principles for non-science majors. Does not meet degree requirements for chemistry or biology majors. >
CHEMISTRY	CHM	101L	INTRO CHEMISTRY LAB	0	introduction chemistry lab >
CHEMISTRY	CHM	102	ORGANIC & BIOCHEM	4	Deals with the principles of organic and biochemistry which are important and useful to non-science majors. Does not meet degree requirements for chemistry or biology majors. Prerequisite: Chm 101. >
CHEMISTRY	CHM	102L	ORGANIC&BIOCHEM LAB	0	organic and biochemistry lab >
CHEMISTRY	CHM	103	CHEM AND ENVIRONMENT	4	Examines the theory and practice of chemistry and related environmental issues. Topics treated will be integrated and historically developed. >
CHEMISTRY	CHM	106	CHEM/ALLIED HLTH SCI	4	A one-semester survey course for non-science majors. General organic, biochemistry, and clinical chemistry are emphasized for students in health support programs. >
CHEMISTRY	CHM	110	SVY/INTRO ORG & BIO	4	A one-semester survey course for non-science majors. General, organic and biological chemistry are emphasized. Does not meet degree requirements for chemistry and biology majors. No prerequisite. >
CHEMISTRY	CHM	110L	SVY/INTR ORG&BIO LAB	0	a one semester survey course for non-science majors. General, organic and biological chemistry are emphasized. This course does not meet the requirements for the degree program in chemistry and biology. >
CHEMISTRY	CHM	111	GENERAL CHEMISTRY I	4	Designed for science majors and is a study of the fundamental principles of chemistry from the standpoint of stoichiometry, gases, states of matter, solutions and equilibrium theory. Laboratory sessions stress the chemical principles discussed in the lecture. >
CHEMISTRY	CHM	103L	CHEM & ENVIRNMNT LAB	0	Chemistry and the environment laboratory. >
CHEMISTRY	CHM	111L	GENERAL CHEM I LAB	0	gen chem I lab >
CHEMISTRY	CHM	112	GENERAL CHEMISTRY II	4	A continuation of Chm 111: kinetics, thermodynamics, oxidation-reduction, atomic and molecular structure, bonding, and periodic relationships are studied. The laboratory work is an introduction to qualitative analysis and includes experiments designed to exemplify chemical principles. Prerequisite: Chm 111. >
CHEMISTRY	CHM	112L	GENERAL CHEM II LAB	0	general chemistry ii lab >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
CHEMISTRY	CHM	201	INTRO TO BIOCHEM	4	A one-semester course in elementary biochemistry for non-science majors having minimum preparation in organic chemistry. Prerequisite: Chm 102.
CHEMISTRY	CHM	201L	INTRO BIOCHEM LAB	0	introduction to biochemistry lab
CHEMISTRY	CHM	311	QUANTITAT ANALYSIS	4	An introductory course in analytical chemistry emphasizing classical titrimetric and gravimetric methods and related theories. Prerequisite: Chm 112.
CHEMISTRY	CHM	301L	ORGANIC CHEM I LAB	0	organic chemistry I lab
CHEMISTRY	CHM	301	ORGANIC CHEMISTRY I	4	Fundamentals of organic chemistry are presented. Modern theory, reaction mechanisms and stereochemistry are included along with nomenclature, preparation, reactions and properties of organic compounds. The laboratory stresses syntheses, chemical and physical properties and an introduction to instrumental techniques. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: Chm 112.
CHEMISTRY	CHM	311L	QUANTITAT ANLY LAB	0	quantitative analysis lab
CHEMISTRY	CHM	321	PHYSICAL CHEM I	4	A study of the fundamental principles of thermodynamics of gases and nonelectrolytes. Topics include kinetic theory, gases, thermodynamic and nonelectrolyte solutions. Prerequisite: Chm 112, 311, Ma 240, Phy 188, and 211.
CHEMISTRY	CHM	321L	PHYSICAL CHEM I LAB	0	physical chem I lab
CHEMISTRY	CHM	322	PHYSICAL CHEM II	4	A continuation of Chm 321. Topics include thermodynamics of electrolytes, atomic and molecular structure and chemical kinetics. Prerequisite: Chm 321.
CHEMISTRY	CHM	322L	PHYSICAL CHEM II LAB	0	physical chemistry II lab
CHEMISTRY	CHM	302	ORGANIC CHEMISTRY II	4	A continuation of Chm 301. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: Chm 301.
CHEMISTRY	CHM	302L	ORGANIC CHEM II LAB	0	organic chemistry II lab
CHEMISTRY	CHM	332	INSTRUMENTAL ANLY	4	Deals with the principles and applications of instrumental methods in chemical and structural analysis. Studies include electroanalytical, spectrophotometric, and chromatographic techniques. Prerequisite: Chm 311.
CHEMISTRY	CHM	332L	INSTRUMENTL ANLY LAB	0	instrumental analysis lab

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
CHEMISTRY	CHM	341	BIOCHEMISTRY	4	A study of carbohydrates, lipids, proteins, enzymes, nucleic acids, vitamins, and hormones in terms of structure, function, and synthesis in living systems. The laboratory includes the isolation, identification, and chemical behavior of biochemically important molecules. Prerequisite: Chm 302 or permission of instructor. >
CHEMISTRY	CHM	341L	BIOCHEMISTRY LAB	0	biochemistry lab >
CHEMISTRY	CHM	352	RADIOCHEMISTRY	3	The study of radioisotope methodology. A laboratory oriented course familiarizing the student with radiation detection and applications in natural science problems. Prerequisite: junior or senior standing or permission of instructor. >
CHEMISTRY	CHM	352L	RADIOCHEMISTRY LAB	0	radiochemistry lab >
CHEMISTRY	CHM	410	SEMINAR	1	Deals with reports emphasizing chemical literature searches and/or current research. Prerequisite: upper division chemistry major. >
CHEMISTRY	CHM	420	QUAL ORGANIC CHEM	3	The identification of organic compounds by various classical and instrumental techniques. Prerequisite: Chm 302. >
CHEMISTRY	CHM	420L	QUAL ORGANIC CHM LAB	0	qual organ chem lab >
CHEMISTRY	CHM	421	ADVANCED ORGANIC CHM	3	An advanced lecture course designed to deepen and expand knowledge in the field. Topics such as reactions, mechanisms, reactive intermediates, photochemistry, kinetics, stereochemistry, natural products, and spectroscopy may be stressed. Prerequisite: Chm 302. >
CHEMISTRY	CHM	431	ADV INORGANIC CHEM	4	A presentation of atomic structure and periodic properties. In addition to other topics; valence bond, molecular orbital, crystal field and ligand field theories are treated. Laboratory sessions include one hour of lecture on theory and techniques in the preparation of representative compounds. >
CHEMISTRY	CHM	431L	ADV INORGAN CHEM LAB	0	advanced inorganic chem lab >
CHEMISTRY	CHM	432	STRUCTURAL CHEMISTRY	3	The symmetry and structural properties of molecular systems are utilized to determine their energy levels. The electronic and vibrational spectroscopic properties of these systems will be predicted also utilizing symmetry properties. These spectra-structure correlations will be made on organic and inorganic systems. Prerequisite: Chm 302. >
CHEMISTRY	CHM	490	PROBLEMS IN CHEM	0	Involves the student in study projects under the direct supervision of an instructor. Library and laboratory research in selected problems. Prerequisite: Permission of instructor. >
CHEMISTRY	CHM	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
COMP SCI	CIS	101	COMPUTERS IN SOCIETY	3	Examines the impact of computers on modern society and provides an understanding of how they are programmed and used. A variety of computer applications from the social sciences, humanities, natural sciences, and professionals will be studied. >
COMP SCI	CIS	102	BASIC PROGRAMMING	3	Introduces problem solving through the use of the programming language, BASIC. Enables students to write programs which they can use for handling data or for instructional programs. >
COMP SCI	CIS	103	INTRO MICROCOMPUTERS	3	Introduces the Disk Operating System for microcomputers and the use of wordprocessing, spreadsheet, and data base management software. >
COMP SCI	CIS	104	COMPUTER SCIENCE I	3	Introduces a high-level programming language as a means of studying problem solving, algorithms, and program structure. Includes data representation, repetition, selection, modular programming, debugging, and verification of programs. >
COMP SCI	CIS	105	BUS PROGRM CONCEPT I	3	An introduction to analyzing and designing solutions to business-related problems using a business programming language. The student will be expected to complete a number of computer programs. Prerequisite: CIS 104. >
COMP SCI	CIS	203	SOFTWARE BUS APPL	3	Advanced applications of spreadsheets, data base management systems, and graphics. Prerequisite: CIS 103 >
COMP SCI	CIS	204	COMPUTER SCIENCE II	3	Emphasizes algorithms, structured programming and program analysis and design. Topics include files, records, recursion, string manipulation, graphics, and dynamic data structures. Prerequisite: CIS 104 >
COMP SCI	CIS	205	BUS PROGRM CONCEPT II	3	A second course in business programming stressing file processing and advanced programming techniques. Substantial programming projects are a part of this course. Prerequisite: CIS 105 >
COMP SCI	CIS	300	PROGRAMMING LANGUAGES	3	Comparative study of current programming languages. Examines the structure of languages and their use in problem solving. Prerequisite: CIS 204 and 230. >
COMP SCI	CIS	301	DATA STRUCTURES	3	Topics to be covered are data types, arrays, records, stacks, queues, linked lists, and trees. Other more advanced topics may include: file structures, recursion, heuristics, and hashing. Prerequisite: CIS 204. >
COMP SCI	CIS	308	OPERATIONS RESEARCH	3	The development and use of the techniques of operation research. Topics include linear programming, queuing theory, probabilistic inventory models and simulation. Prerequisite: CIS 203 or 204; MA 105 or 250; MA 190, 260 or 280; MA 111 or 140. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
COMP SCI	CIS	310	SYSTEMS ANALYSIS I	3	An introduction to the concepts of systems analysis and design. Problem definition; data gathering, information analysis, presentation techniques, implementation planning, system controls, documentation. Selected case studies are examined. Prerequisite: Bus 130, and CIS 103 or 105.
COMP SCI	CIS	320	COMPUTR ARCHITECTURE	3	Classification of computers. Defining hardware and software interfaces within a computer system. Special purpose architectures. Prerequisite: CIS 230
COMP SCI	CIS	325	OPERATING SYSTEMS	3	Functions and characteristics of an operating system. Subject material covered will be concurrent processes, system nucleus, memory management, input and output, filing system, resource allocation and scheduling, system protection and reliability, and job control. Prerequisite: CIS 230 and 301.
COMP SCI	CIS	335	ASSEMB LANGUAGE PROG	3	Assembly language programming including macro and subroutines will be studied. Emphasis will be on application and systems programming. Machine organization for a general purpose computer will be covered. Prerequisite: CIS 204 and 230.
COMP SCI	CIS	361	ANALY MTDS INFO SCI	3	The study of key mathematical developments in computer science. Topics will include: sets, functions, relations, graphs, and digraphs. Other computer-specific topics may include: recursion, finite state machines, formal language theory, list processing support for management and decision functions. Prerequisite: CIS 204 and 230.
COMP SCI	CIS	330	COMPUTR ORGANIZATION	3	Overview of computer hardware, computer structure, machine representation of information, instruction code, addressing, concepts of digital logic, microprogramming and assembly language programming. Prerequisite: CIS 104.
COMP SCI	CIS	340	DATABASE SYSTEMS	3	First course in the theory and usage of database management systems. Provides experience in the creation of an actual database system and the manipulation of the data in it. Prerequisite: CIS 205 and 301.
COMP SCI	CIS	401	MGMT INFORMATION SYS	3	Advanced study of information processing systems which provide both transactional processing for an organization and also information and processing support for management and decision functions. Prerequisite: CIS 310.
COMP SCI	CIS	420	CHANGE TOPIC	0	Study of a specialized topic. Possible topics include Computer Aided Design, Data Base Systems, Telecommunications, Advanced Business Programming.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
COMP SCI	CIS	314	AUTOMATED ACCTG SYST	3	A general introduction to the development and implementation of an electronic data processing accounting information system. Approach, elements of design, input media, computer-based accounting, audit trails, relevancy and timeliness of information. Prerequisite: Acc 215 and Cis 203 or permission of instructor. need presidential approval 5/93 >
COMP SCI	CIS	430	PROGRAM TRANSLATION	3	A first course dealing with the theoretical aspects of program translation. Concepts related to compilers, assemblers, and interpreters will be covered. Prerequisite: CIS 230 and 301. >
COMP SCI	CIS	440	ARTIFCL INTELLIGENCE	3	The application of computers to solve problems and to understand the principles of human intelligence including search, reasoning, and problem reduction. Applications to games, expert systems, natural language, learning, robotics, and computer vision. Prerequisite: CIS 204. >
COMP SCI	CIS	441	SWITCH THRY&LOGC DSG	3	An introduction to electronic circuits used in all computers, instruments, communications systems, control systems, and in fact all digital systems. Topics presented will include Boolean algebra, switching theory, logic design, and major digital circuit lines. Prerequisite: CIS 204 and 230. >
COMP SCI	CIS	450	ORGANIZNTL INTERNSHP	0	Supervised and evaluated participation in the regular activities of a business, government, agency, or appropriate organization. In consultation with the supervising faculty member, the student is expected to prepare a comprehensive final report relating to the work accomplished during the field experience. >
COMP SCI	CIS	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
COMP SCI	CIS	490	COMPUTER COMMUNICATN	3	First course in data and computer communications. Communication principles, computer requirements, networking, standards, and future trends and issues will be examined. Prerequisite: CIS 330. >
CJA	CJA	100	INTRO ADMIN OF CJA	3	An introduction to the field of criminal justice, its major components, roles and functions. Emphasis is placed upon concepts of law and the historical descriptive analysis of the police, courts, and corrections. >
CJA	CJA	201	INTRO CORRECT ADMIN	3	Origin and history of incarceration practices and procedures; associated organizational, criminological and phenological concepts; categories of inmates and laws affecting classification; special custody problems and treatment programs, staff organization; professional, administrative and custodial personnel training, recruitment and promotions; interagency relationships and cooperation; release programs, furloughs, work-release, and final discharge. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
CJA	CJA	202	INTRO LAW ENFORCEMNT	3	Introduction to law enforcement problems and practices; its legal, political, and historical framework. An analysis of police organizations and their relationship with other criminal justice and social agencies. >
CJA	CJA	240	ORGANIZED CRIME/AMER	3	An investigation into the historical background and development of organized crime as well as the structure and operations of criminal syndicates. Specific types of organized crime will also be explored with a final analysis of the legal responses to this social problem. >
CJA	CJA	251	POLICE-COMM RELATION	3	Basic definitions; rule of law; individual and societal aspects of police-community relations; police and minority groups; social change and law enforcement; principles of programming in police-community relations; police discretion; police role, police problems. >
CJA	CJA	252	INVEST & INTERROGATN	3	An introduction to the fundamentals of criminal investigation, rules of evidence, sources of information, observations, descriptions, and identifications, including collection, preservation, and processing of physical evidence, records, reports, statements, case preparation, surveillance and undercover techniques, modus operandi information. >
CJA	CJA	256	PROBA/PAROL/COM CORR	3	Examination of community treatment in the correctional process; contemporary usage of presentence investigation; selection, supervision, release of probationers and parolees; diversion, work release, furlough, halfway houses, and jails. >
CJA	CJA	257	CORR INSTITUTE & SERVC	3	Intensive analysis of extramural programs for juvenile and adult offenders; professional functions in the total correctional process. >
CJA	CJA	276	CRIMIN:MULTIDIS APPR	3	Acquaint students with the nature and forms of crime. Major areas of concern are the functions of law, the scientific study of crime, criminological topologies, classical and positivistic definitions of crime, comparative criminology, and the problem of punishment. >
CJA	CJA	301	INDUSTRIAL SECURITY	3	Examines basic industrial security concepts, principles, and methodologies. Provides knowledge of procedures and programs currently applied in industrial security management. >
CJA	CJA	324	ADMIN OF JUSTICE	3	An examination of the role and function of the judiciary in the criminal justice decision-making process. It includes a survey of America's court system and an in-depth analysis of its major components. Emphasis will also be placed on important interactions within the judicial system and its major interrelationships with other criminal justice agencies. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
CJA	CJA	326	COURT MANAGEMENT	3	Examines the major problem areas of court administration; judges as administrators; budgeting, calendars, case flow management; jury selection, juror utilization; records management, legal forms, forms design; personnel practices and administration. This course is problem solving oriented. Field trips, investigation, and guest lectures will supplement the materials presented in class.
CJA	CJA	336	CRIMINALISTICS	3	Examines the phase of the criminal investigation process concerned with physical evidence. Major emphasis will be placed upon legal and technical consideration in the recognition, collection, and preservation of various categories of physical evidence and the process through which it is transmitted to the crime laboratory. Attention will also be given to knowledge requirements of the evidence technician in terms of the capabilities and techniques of the crime laboratory. Prerequisite: CJA 252 or permission of instructor.
CJA	CJA	340	MGT VOLUNTEERS IN CJA	3	Develops an understanding of the importance of the volunteer movement in criminal justice administration. It shows how volunteers have been and can be used in criminal justice agencies. Analyzes the motives of volunteers and assists the professional in the screening and training of volunteers. Recruitment and rewarding of volunteers is also discussed.
CJA	CJA	354	CRIMINAL LAW	3	Principles, theories and doctrines of the law of crimes with a unified study of legal defenses; elements and proof in crimes of frequent concern; importance of criminal law at the enforcement level is considered from crime prevention to the courtroom; case analysis.
CJA	CJA	355	EVID & CRIM PROCED	3	Rules of evidence of particular import at the operation level in law enforcement; types of evidence; principles of admissibility; the attendance and production of witnesses, their competency and impeachment; arrest, search and seizure; use of force; Supreme Court decisions affecting this area of criminal justice administration.
CJA	CJA	356	LAW OF CORRECTIONS	3	Analysis of the legal dimension of sentencing; the correctional treatment of persons under sentence, and conditional release and revocation with emphasis on administrative decision-making in the correctional process.
CJA	CJA	357	CORRECTNL STRATEGIES	3	Offender classification; special offender groups, treatment, custody, recidivism, and strategies designed to change offender conduct.
CJA	CJA	359	JUVENILE JUSTICE	3	Structure and format of the juvenile justice system-police, courts and corrections; analysis and description of the organizational structure of each of the subsystems of the juvenile justice process; introduction to juvenile justice literature and research findings.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
CJA	CJA	401	ADV INDUSTRL SECURITY	3	Advanced course of industrial and government security concepts, principles, and methodologies; knowledge of relationships of industrial security procedures in business organizations to the Department of Defense National Security Program. >
CJA	CJA	395	DELINQ&CRIM JUST SYS	3	Expose students to the full impact of the delinquency problem. Theories of delinquency causation, prevention, and rehabilitation will be critically examined. >
CJA	CJA	405	RSCH MTD IN CRM JUST	3	An introduction to research methodology with particular emphasis placed on criminal justice issues. Examines research theory, its major components, and its application to various criminal justice agencies including the police, courts, correctional institutions, etc. >
CJA	CJA	450	PRACTICUM	0	Educational and work experience in an actual criminal agency-law enforcement, courts, corrections or industrial security; applicable agency research project; periodic conference with criminal justice agency personnel and faculty advisor. >
CJA	CJA	453	POLICE ORGANIZ & ADM	3	Organizational theory, budgeting, personnel management planning, information management theory, civil service, unions, management prerogatives, supervision, executive development, manpower distribution schemes, and policy development and execution as applied in both small and large law enforcement agencies. >
CJA	CJA	496	CHANGE TOPIC	3	An intense analysis of selected topics in law enforcement, adjudication, and correctional fields. Intended for advanced undergraduates, graduates, and inservice professionals. >
CJA	CJA	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
COOP EDUC	COE	350	COOPERATIVE EDUC II	3	A work experience program which provides an opportunity to work in the students field of study while attending college. It is intended to supplement and extend his/her classroom experiences. >
COMM&THTRE	COM	101	ORAL COMMUNICATION	3	Objectives are to help the student to formulate his/her own ideas coherently, evaluate factual material, and use sound reasoning patterns in his/her preparation and attempts to communicate concepts orally; to determine and select the most effective means of expression in formal and informal speaking situations. Required of all Mansfield students. >
COMM&THTRE	COM	200	ORAL INTERPRETATION	3	An introductory course in presenting oral readings of various literary genres. It involves written analysis and practical experience in presenting selections, and the understanding and appreciation of oral interpretation as the communication of the readers impression of the authors intent as an artistic representation of his/her world in a piece of literature. Prerequisite: Com 101 or permission of instructor. >

DEPARTMENT	PREFIX	COURSE NUMBER TITLE	CR	COURSE DESCRIPTION
COMM&THTRE	COM	201 INTRO TO MASS MEDIA	3	Studies the application of modern mass media, its origin, history, theory, principles, and philosophy to the areas of entertainment, instruction, and audience persuasion. Practical experience in the basic media is provided. >
COMM&THTRE	COM	203 VOICE & ARTICULATION	3	A study of basic physiology and phonetic analysis. It begins with transcription and evaluation of the students speech. Subsequent attention is given to the correction of individual faults in voice and articulation habits in order to achieve clear and effective communication. Prerequisite: Com 101 or permission of instructor. >
COMM&THTRE	COM	204 PUBLIC SPEAKING	3	Advanced study of the construction, preparation, and delivery of the basic types of speeches and of their effect in public speaking situations. Prerequisite: Com 101 or permission of instructor. >
COMM&THTRE	COM	206 FORENSICS	1	Designed for the student interested in intercollegiate forensics. Students are involved in the theory and practice of competitive speaking in debating, extemporaneous speaking, original oratory, oral interpretation, and other forensic events. Prerequisite: permission of instructor. >
COMM&THTRE	COM	210 INTRO PUBLIC RELATNS	3	Study of the history, principles, and practice of public relations in business, education, government, and other organizations. >
COMM&THTRE	COM	215 AUDIO PRODUCTION	3	An introductory course in the theory and operation of audio equipment and the creation of various audio presentations. Students write, produce, and perform in a series of individual and group projects. >
COMM&THTRE	COM	220 AMER BROADCASTNG HST	3	An introduction to the American broadcasting system which examines the history of the medium and relates it to current issues in electronic media. The course utilizes historical programming examples, examines broadcast and cable technology, and develops student awareness of the importance of electronic media in our society. Prerequisite: Com 201. >
COMM&THTRE	COM	230 WRITG/BROADCAST MEDIA	3	A basic course in the writing techniques used in American radio and television. The course focuses on the development of original ideas for a range of commercial and promotional needs, including an original television series. Prerequisite: Jn 100 >
COMM&THTRE	COM	301 TV PROGRAM DESIGN	3	Study of the theoretical and practical aspects of television program conceptualization, scripting, production, presentation, and evaluation. Prerequisite: Com 201 and permission of instructor. >
COMM&THTRE	COM	303 TV & RADIO ANNOUNCNG	3	In-depth training in effective communication skills employed by broadcasters. Prerequisite: Com 201, 203, 215 & 301. >
COMM&THTRE	COM	304 TV PROGRAM DESIGN II	3	Study of the theoretical and practical aspects of television program conceptualization, scripting, production, editing, presentation, and evaluation. Emphasis is on the application of these elements to a program of thirty minutes or longer. Prerequisite: Com 201 and 301. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
COMM&HTRE	COM	310	ELECTRONIC MEDIA MGT	3	Presents current practices, problems, and issues of electronic media management. Lectures, readings, and class presentations by industry representatives provides an introduction to the business aspects of electronic media. Prerequisite: Com 201 and 220. >
COMM&HTRE	COM	320	ADV PUBLIC RELATIONS	3	An advanced level investigation of the theory and practice of public relations. Special emphasis is placed on discovering the various publics through simulated public relations campaigns. Prerequisite: junior standing. >
COMM&HTRE	COM	325	INTERPERSONAL COMMUN	3	Development of cognitive, affective, and psychomotor skills as they relate to interpersonal communication. Student participation in both the discussion of principles and application of interpersonal exercises. >
COMM&HTRE	COM	330	PARLIMENTRY PROCEDUR	3	Examines history, philosophy, and practice of parliamentary procedure as it applies to our democratic society. Emphasis is on the development of procedures and includes practice in the use of the theories. >
COMM&HTRE	COM	350	BROADCAST WORKSHOP	3	Emphasizes the production of programs designed for public reception. Students will work under professional production team discipline in the areas of format development, advanced writing production, and post production. Prerequisite: Com 201, 301 and 304. >
COMM&HTRE	COM	400	COMMUNICATION THEORY	3	Study of the major concepts, principles, models, and theories of human communication including, General Systems Theory, General Semantics, role behavior, the diffusion of innovation, the role of language in communication, linguistics, and the psychology of communication. These provide a framework for an investigation of the process of communication on the intrapersonal, interpersonal, small group, one-to-many, and mass media levels. >
COMM&HTRE	COM	401	PERSUASION	3	A study of the psychology of persuasion and its use in a free society, and propaganda and its effect on our daily living. Prepares the student to evaluate persuasive messages, to use persuasion effectively, and to appreciate the ethics of persuasion. >
COMM&HTRE	COM	340	PROF ISSUES IN COMMU	3	Research, prepare, present, and evaluate contemporary issues in the communication field. Investigate professional communication associations and career paths in respective emphases. Prerequisite: Com 101, 201, and UN 100. >
COMM&HTRE	COM	360	ORGANIZATNL COMMUN	3	Examines the process of communication within organizations. Investigates formal and informal communication networks to gain a greater understanding of the vital role that they play within organizational structures and operations. Prerequisite: Com 101. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
COMM&THTRE	COM	403	SPEECH WRITING	3	Practical experience in the techniques of speech writing for speakers and public relations practitioners. Emphasis is placed on actual speech writing situations. >
COMM&THTRE	COM	404	TELEVISION REPORTING	3	Focus is on concepts and practice of broadcasting techniques as applied to live and taped television performance. Prerequisite: Com 203, 303 and 304 or permission of instructor. >
COMM&THTRE	COM	410	INTERNSHIP	6	Supervised and evaluated participation in varied settings provides practical application of theoretical principles. >
COMM&THTRE	COM	420	PUBLIC RELATN WKSHP	3	Practical study of public relations. Each student is involved in planning and directing a public relations program for an on-campus organization. Prerequisite: Com 203, 210, 320 and 401. >
COMM&THTRE	COM	435	INTERNATL BROADCASTG	3	Designed to familiarize students with international broadcasting systems and global communication issues. Lectures, research projects, and classroom presentation of international radio and television programming examples are used to broaden perspectives and international understanding. Prerequisite: Com 201 and 220. >
COMM&THTRE	COM	440	COMMUNICATON LAW	3	Provides a background in communication law as it affects the conduct of the print and electronic media industries. Will study landmark cases and investigate legal industries and ethical issues which confront communication professionals. Prerequisite: Com 201. >
COMM&THTRE	COM	450	CHANGE TOPIC	0	A project initiated by the student to increase his/her knowledge in an advanced area not offered as a regular class. Intensive study of a subject area under the guidance of a faculty member who has special expertise in that subject. Prerequisite: permission of instructor. >
COMM&THTRE	COM	415	CONTEMP AMER HUMOR	3	A critical study of contemporary humor employing a variety of communication theories of analysis and criticism. Areas such as television, film, writing, and stand-up will be examined. Prerequisite: Com 101. >
COMM&THTRE	COM	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
RP HLT SCI DIT		111	INTRO TO NUTRITION	3	Introduces the science of nutrition, the nutrient needs of the body, and the foods that meet these needs. >
RP HLT SCI DIT		215	PRINCIPLES OF FOOD	3	Applies physical and chemical principles as related to the selection, preparation, and preservation of food. >
RP HLT SCI DIT		215L	PRIN OF FOOD LAB	0	Principles of food lab >
RP HLT SCI DIT		216	MEAL MANAGEMENT	3	Consumer education in food production, supply, marketing, and budgeting; laboratory experience in planning, preparation, service and evaluation of meals. Prerequisite: Dit 111 and 215 or permission of instructor. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI DIT		216L	MEAL MANAGEMENT LAB	0	Meal management lab
RP HLT SCI DIT		314	NUTR THRU LIFE CYCLE	3	A study of nutritional requirements and issues as they pertain to fetal development, infancy, childhood, adolescence, pregnancy and the adult years. Prerequisite: Dit 111 or permission of instructor.
RP HLT SCI DIT		315	FOOD SERV ORG & MGMT	3	Management functions in the food service industry. Methods, procedures, and techniques in dealing with personnel. Prerequisite: Dit 215 and 216 or permission of the instructor.
RP HLT SCI DIT		316	COMMUNITY NUTRITION	3	Addresses issues of nutrition services in the community including needs, assessment, implementation, and program evaluation. Provides opportunity for student to become familiar with WIC, school lunch, congregated meals, cooperative extension, etc.
RP HLT SCI DIT		410	DIET THERAPY	3	The study of dietary adaptation to accommodate physiologic changes which accompany disease states. Communication and documentation skills for clinical dietetics are emphasized. Prerequisite: Dit 111, 214, 216, Chm 101 and 102.
RP HLT SCI DIT		411	QUANTITY FOOD PROD	4	Quantity food production, menu planning, purchasing, and sanitation techniques in food service. Laboratory experience in quantity food production. Prerequisite: Dit 215 and 216 or permission of instructor.
RP HLT SCI DIT		417	SURVEY OF NUTRITION	3	Chemistry of nutrients, metabolism, and normal nutritional requirements throughout the human life cycle. Current research, nutrition myths, and assessment techniques are highlighted. Prerequisite: eight credits in Chemistry, three credits in foods and Dit 111.
RP HLT SCI DIT		419	DIETETICS PRACTICUM	3	Students are employed or volunteer in a hospital or food service operation. A written description and an oral presentation of their experience is required. Equivalent of six weeks employment. Prerequisite: Dit 410 and 411 or permission of instructor and senior standing.
RP HLT SCI DIT		411L	QUANT FOOD PROD LAB	0	Quantity food production lab
POLIT/ECON ECO		101	PRIN OF MACROECON	3	An introduction to aggregate economics with emphasis on interdependence of sectors of an economy, aggregate concepts, determination of national income and fiscal and monetary policy for stabilization.
POLIT/ECON ECO		102	PRIN OF MICROECON	3	Examines the mechanism of the free enterprise system; pricing, production, and employment under various market conditions; functional distribution of income; selected topics in modern theory of general equilibrium and welfare economics.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
POLIT/ECON	ECO	204	HIST OF ECON THOUGHT	3	A study of economic ideas from the eighteenth century to the present. A brief review of physiocracy and mercantilism followed by a closer survey of classical liberalism, pre-Marxist and utopian socialism. Marxism, neoclassicism, institutionalism, and other contemporary developments. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	205	CONTEMP ECON PROBS	3	Examination of some of our crucial economic problems: unemployment, inflation, poverty; also some of the minor issues: right-to-work, national debt, and of several international concerns, e.g., the Common Market. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	301	INTERM MACROECO THRY	3	Develops models of the macroeconomy and analyzes the level and distribution of income, theories of unemployment, theories of consumption, theories of the public economy, theories of investment, the role of money, theories of crisis, theories of inflation, and theories of growth from alternative paradigms. A macroscopic view of the economy and the ability to analyze and forecast business conditions are developed. Prerequisite: Eco 101 & 102 or permission of instructor.
POLIT/ECON	ECO	302	INTERM MICROECO THRY	3	Introduction to the models and methods of modern microeconomic theory, concentrating on individual and firm decision making and on industry equilibrium; a brief treatment of general equilibrium theory and welfare analysis. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	311	MONEY AND BANKING	3	An inquiry into the monetary system of the U.S. Brief examination of historical development; the functioning of monetary policy is considered. Emphasis is on the public/private nature of our banking system. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	315	PUBLIC FINANCE	3	Investigates theories of taxation; normative and positive theories of the public economy; various taxes; tax incidence and the distribution of income and wealth; taxes and microeconomic behavior; and the distribution of expenditure benefits. Provides students with an understanding of the functions of taxation and public expenditures in the process of accumulation and legitimization. Prerequisite: Eco 101 and 102.
POLIT/ECON	ECO	321	COMPARATIVE ECON SYS	3	Comparative analysis of different ways that countries solve their fundamental economic problems. Covers all systems from capitalism to communism. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	333	INTERNATIONAL ECON	3	A study of the economics aspects of international relations with particular emphasis on the economic basis for trade, international monetary problems, commercial policy, and international agencies and agreements. Prerequisite: Eco 101 and 102 or permission of instructor.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
POLIT/ECON	ECO	305	ECONOMETRICS	3	Introduction of the analysis and interpretation of economic data and examines the general linear regression model and its application to the classical model. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	401	LABOR ECONOMICS	3	Equal consideration is given to the market and institutional factors of labor management relations. The role of government especially as defined in major legislation is examined. Historical development of trade unions serves as an introduction. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	405	MATHEMATICAL ECON	3	An introduction to using mathematical tools in economic analysis. Prerequisite: Eco 101, 102 and MA 109 or permission of instructor.
POLIT/ECON	ECO	420	INDUSTRIAL ORGANIZTN	3	Examines the market structure, conduct, and performance in the unregulated sector of the American economy. Characteristics and economic problems of regulated public utilities is also studied, as well as, public policies related to promotion or restriction of competition. Prerequisite: Eco 101 and 102 or permission of instructor.
POLIT/ECON	ECO	450	INTERNSHIP	3	Designed to allow the student the opportunity to learn in a professional setting. It must involve the application of economic theory and provide an opportunity for work involving the application of academic skills. Consult an academic advisor for departmental internship policies.
POLIT/ECON	ECO	485	MANAGERIAL ECONOMICS	3	A rigorous development and application of microeconomic theory with an emphasis on the tools and techniques most useful to managers in a decision making environment. Topics include demand analysis, production and cost analysis, market structure, pricing strategies, risk analysis, estimation and forecasting. Prerequisite: Ma 105 and 111 or permission of instructor.
POLIT/ECON	ECO	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.)
EDUCATION	ED	090	COLLEGE STUDY SKILLS	3	Designed to develop effective study skills for assignments or classes requiring listening, note-taking, test-taking, or library use and students needing assistance in effective use of college textbooks. DOES NOT COUNT TOWARD TOTAL CREDITS NEEDED FOR GRADUATION.
EDUCATION	ED	100	SCHOOLS AND SOCIETY	3	A basic resource for understanding the critical problems facing public policy in education and gaining reliable knowledge about the educational past.
EDUCATION	ED	101	INTRO TO EDUCATION	1	Provides pre-professional experiences and information about fundamental concepts related to teaching and learning in elementary and secondary schools.

DEPARTMENT	PREFIX	COURSE NUMBER TITLE	CR	COURSE DESCRIPTION
EDUCATION	ED	201 PERSONAL CAREER DEV	2	Designed as an overview of the world of work relevant to western society. Current theories of vocational development are explored and the students vocational development is investigated. Laboratory work involves the collecting, evaluating, classifying, and dispensing of occupational, educational, and social information. >
EDUCATION	ED	202 SEC PRE-PROF EXPR	2	Introduction to observation and participation in the secondary schools, including a field experience component. Students will develop a greater understanding of the secondary school as a setting for teaching and learning. Prerequisite: Ed 101. >
EDUCATION	ED	300 SEC SCHOOL METHODS	3	Explores principles, materials, and methods of teaching in the secondary school. To be taken the semester before student teaching or by permission of instructor. Prerequisite: 2.5 QPA. >
EDUCATION	ED	301 EVALUATIVE TECHNIQUE	2	A basic testing and measurements course. Students study the domains of educational objectives, evaluation theory, the application of basic statistics to test data, and principles for selecting and interpreting standardized tests. Students will develop a test related to their area of teaching specialization. >
EDUCATION	ED	302 INSTRUCTIONAL TECH	2	An introduction to both traditional and contemporary types of instructional media including micro-computers, interactive teleteaching, and telecommunications. Students demonstrate skill in the use, production, and operation of selected areas of this technology. >
EDUCATION	ED	306 TUTORING IN EDU SYST	3	Offers training in tutoring techniques for various subjects. Provides information in training, utilizing, and evaluating tutors in elementary and secondary classroom. Students participate in supervised tutoring sessions with college students. >
EDUCATION	ED	310 RDG PRAC CONTNT AREA	3	Designed to provide instructional experiences that enable secondary content teaching candidates and special field teacher candidates to develop selected basic knowledge, skills, and attitudes regarding the reading learning process. >
EDUCATION	ED	330 GUIDNC & COUNSL TECH	3	The responsibility of the teacher in the guidance program of the school; the identification of student problems; significant information and its use; techniques in guidance and counseling are explored. >
EDUCATION	ED	400 STUDENT TEACHING	**	(By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the departmental supervisor. Prerequisite 2.5 QPA. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
EDUCATION	ED	401	HIST & PHIL OF EDUC	3	Foundations course in the study of professional foundations of education, and the relationship that exists between the school and the society it serves. The course reviews cultural, historical and educational milestones from the Greeks to modern time. >
EDUCATION	ED	312	TCH SEC ENG LANG ARTS	3	Designed to prepare the student for the teaching of middle school/junior/senior high school English communication arts. In investigating the present resources of the school, the needs of the learners, and the potential for development in the field of English language study, the student will be preparing to function in either a traditional or experienced-based school curriculum. Prerequisite: 2.50 QPA or permission of instructor. >
EDUCATION	ED	314	TCHG MATH SEC SCH	3	Examines methods of teaching secondary school mathematics in the Information Age, the mathematics education reform movement, curricular changes and the standards for school mathematics, instructional methodology, use of materials, and development of skills required of secondary school mathematics teachers. Prerequisite 2.50 QPA or permission of instructor. >
EDUCATION	ED	402	CONTP ISSUES IN EDUC	2	A course preparing students for entering the teaching profession, first as a student teacher, and second as a beginning teacher. Emphasis is placed on issues and trends in education. >
EDUCATION	ED	420	BASIC PHOTOGRAPHY	3	A thorough introduction to the basic tools and creative techniques of black and white photography. Topics include operation and use of 35 mm camera and lens, exposure, film processing, printmaking, composition and design, and developing visual sensitivity. >
EDUCATION	ED	421	TELEVISION PRODUCTN	3	Covers the fundamentals and principles involved in the production of television programs. Includes the operation of TV equipment, production of visuals used in TV, and the production of a program. >
EDUCATION	ED	422	MOTION PICTURE PHOTO	3	Examines the process of planning and production of 8 mm and 16 mm films. Students plan the content for their films, select the treatment, film the subject, edit the film, add sound, and demonstrate the use of their film. Prerequisite: ED 420 or 421 or permission of instructor. >
EDUCATION	ED	410	HST/CURRENT ISSU ED	3	Foundations of the historical and philosophical bases of education in a democracy and the relationship that exists between the school and the society it serves. Reviews cultural, historical, and educational milestones from the Greeks to modern times, with specific focus on contemporary education. A major facet of the study will be how education can effect societal change with reference to futurists' predictions of demands and opportunities for education in the twenty-first century. Prerequisite: junior or senior standing. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
EDUCATION	ED	313	TCHG SCIENCE SEC SCH	3	Designed to provide the framework on which prospective science teachers can build their teaching activities. Areas of study will include goals and objectives of secondary science education; a study of principles of learning, strategies and techniques, and the role of instructional materials in the classroom. Experience will include observation and participation. Prerequisite: 2.50 QPA or permission of instructor.
EDUCATION	ED	480	COMPUTERS IN EDUC	3	Designed to instruct undergraduate education majors in the various uses of computers in the schools. Prerequisite: Junior or Senior standing or permission of instructor.
EDUCATION	ED	485	TEACHING OF ADULTS	3	Designed to identify characteristics and needs of various target groups choosing or needing to be involved in educational offerings for adults. Explores lifelong learning as a phenomenon relative to many societal influences, and develop programs, teaching modules, and units which serve both society and the individual. Dual listed with 585.
EDUCATION	ED	488	DISTANCE LRN/TELETECH	3	A survey and analysis of the distance learning movement in the United States with an emphasis on audiographics teleteaching.
EDUCATION	ED	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.)
EDUCATION	ED	482	COMPTR IN ED-MTD&MTL	3	Designed to instruct undergraduate education majors in the design and organization of the computer learning environment; and in the selection, utilization, and evaluation of courseware. Dual listed with 582.
EDUCATION	ED	305	EDUCATIONAL PSYCH	3	A study of the application of learning theory principles to the educational and institutional setting. Provides demonstrations and field experiences to enhance the applicability of these principles. Prerequisite: Psy 101.
EDUCATION	ELE	185	ADV RDG/STUDY SKILLS	2	A program designed for students needing assistance in developmental reading.
EDUCATION	ELE	202	PRE-PROF EXPERIENCE	2	Provides sophomores with clinical experiences in elementary education which include identification and analysis of current educational practices, brief episodes of exploratory teaching, investigations of career possibilities and their requirements, an orientation to the Education Department and informal advisement seminars.
EDUCATION	ELE	300	BEGINNING SCHL YEARS	2	A study of the developmental needs of the young child, theoretical bases for major teaching functions, current trends in activities, teaching procedures and materials, and observation in neighboring schools.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
EDUCATION	ELE	301	OBSERV & PARTICIPATN	3	Provides juniors with the following observation, participation and professional guidance experiences: observation of an elementary classroom; orientation to policies and practices of an elementary school; opportunity to observe the in-service teacher in the performance of his/her duties; introduction to administrative duties of an elementary classroom; the privilege of working with individual children, small groups of children and an entire classroom under supervision; and the opportunity to receive feedback on performance from the cooperating teacher and the college supervisor. Prerequisite: 2.50 qpa
EDUCATION	ELE	350	CHILD DEVELOPMENT	3	Examines development from conception and infancy, through preschool and middle school, and ends with adolescence. Major developmental theories that focus on the interaction of heredity and the environment are the key components. >
EDUCATION	ELE	355	INTR EARLY CHLDHED	3	introduction to ece >
EDUCATION	ELE	360	CHILDRENS LITERATURE	3	Uses of children's literature in the preschool and elementary school curriculum; promoting interest in children's books; social themes and issues reflected in children's literature. >
EDUCATION	ELE	383	TCHG READING ELE SCH	3	Theoretical bases of the reading process; components of reading skill; major approaches to instruction; methods and materials for teaching elementary reading are examined. Prerequisite: 2.5 QPA >
EDUCATION	ELE	384	TCHG MATH ELEM SCHL	3	Methods of teaching mathematics in the "Information Age", the reform movements curricular changes and emphasis, instructional methodology and use of materials, and development of skills required of elementary school teachers are examined. Prerequisite: 2.5 QPA >
EDUCATION	ELE	386	TCHG SOCIAL STUDIES	3	Principles, problems, materials, and techniques for the teaching of elementary social studies. In-school experience provided. Prerequisite: 2.5 QPA >
EDUCATION	ELE	362	WHOLE LANG/EMERG LIT	3	Introduction to the whole language approach to supporting emerging literacy in preschool and primary grade classrooms. Both current practices and theoretical foundations will be surveyed. Will model whole language strategies and methods of evaluation. Prerequisite: Ele 360. Dual listed with 525 >
EDUCATION	ELE	387	TEACHING SCIENCE	3	Principles, problems, materials and techniques for the teaching of science in the elementary schools. Prerequisite: 2.5 QPA >
EDUCATION	ELE	400	STUDENT TEACHING	**	(By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the departmental supervisor. Prerequisite: 2.5 QPA. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
EDUCATION	ELE	402	SELECTED TOPICS	0	Designed to let students carry out in-depth studies in elementary teaching techniques. Includes lectures, seminar periods, and resource persons. Emphasis on student leadership, participation, and reading and discussion of educational literature.
EDUCATION	ELE	403	COM SKIL WKSP EL TCH	3	Designed as a workshop for undergraduate students who have completed ELE 383 and for in-service classroom teachers. Emphasis is on investigating techniques used by elementary teachers to improve communication skills for children. Prerequisite: 2.5 QPA
EDUCATION	ELE	412	RDG/WRTG BRITISH SCH	3	An examination of the integrated language arts curriculum employed in British education. This companion course to "Introduction to British Education" includes first-hand experiences observing and participating techniques used by British schools.
EDUCATION	ELE	405	EARLY CHILD CURR SEM	3	Theoretical foundations of early childhood; planning including the classroom learning environment, schedules, goals, and thematic units; developmentally appropriate strategies for guiding children's learning and behavior; observing, recording, and evaluating; including parents and children with special needs. Prerequisite: Ele 301 and 362. Dual listed with 505
EDUCATION	ELE	425	DIAG & REMED READING	3	Tests and techniques to prevent, detect, and correct reading difficulties; special methods and materials for problem readers. Prerequisite: ELE 383 or permission of instructor.
EDUCATION	ELE	488	INFRML DIAG/READINES	3	Designed to alert teachers to cognitive and affective factors which influence a child's readiness to learn. Emphasis is on informal assessment of cognitive and affective behavior as a basis for decisions about instruction for a child.
EDUCATION	ELE	489	ENVIRNMTL ED/ELE TCH	3	A study of the methods, materials and science background necessary to teach environmental education. Emphasis is on both science content and psychological grade placement of various activities.
ENGLISH	ENG	045	CONVERSATN&WRITN ENG	3	Designed to raise skills of international students in conversation and elementary english grammar so they are competent to function in classes at the university that are taught in english. Students learn and practice grammar, syntax, and idioms through written drills, oral exercises, and practice paragraphs. Open to students who score 515 or below on TOEFL test. Two hours a week are required in the language lab. DOES NOT COUNT TOWARD TOTAL CREDITS NEEDED FOR GRADUATION. MEETS 090 REQUIREMENT.
ENGLISH	ENG	090	BASIC WRITING SKILLS	3	Designed to prepare students to do college-level writing. DOES NOT COUNT TOWARD TOTAL CREDITS NEEDED FOR GRADUATION.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ENGLISH	ENG	100	INTRO WOMENS STUDIES	3	Cross-disciplinary and cross-cultural examination of the ways that language, images, and socialization have constructed women's roles. Examines contemporary women's issues (work and family, sexuality, violence against women), as well as the women's movement and the role of women artists. Emphasis is on students (both female and male) working to discover the impact of these roles and issues in their own lives as well as in the larger world.
ENGLISH	ENG	112	COMPOSITION I	3	Intensive reading and writing of expository prose. Analytical and critical thinking and college-level research skills are emphasized. Prerequisite: Placement score 78 + or Eng 090 or equivalent transfer course.
ENGLISH	ENG	115	INTRO TO LITERATURE	3	Introduction to reading poetry, fiction, drama for understanding and enjoyment.
ENGLISH	ENG	207	RDGS IN BRITISH LIT	3	Selected readings from British literature.
ENGLISH	ENG	208	RDGS IN AMERICAN LIT	3	Selected readings from American literature.
ENGLISH	ENG	220	CHANGE TOPIC	3	A study of one of the following topics: Black Literature, Women's Literature, other Minority Literature, Recent Literature, Film, and Folklore.
ENGLISH	ENG	224	INTRO TO LINGUISTICS	3	Methods of analysis and description of language and ways in which human beings use their language. Of interest to students who wish to continue study of linguistics as well as those in a variety of professions who wish to read with understanding linguistic literature in their own field.
ENGLISH	ENG	225	ENGLISH GRAMMAR	3	A systematic description of the rules of modern English grammar, making use of both traditional and contemporary grammatical theories.
ENGLISH	ENG	226	HIST OF ENG LANGUAGE	3	A study of the development of the English language from Old English to modern times with special attention to the causes of linguistic change.
ENGLISH	ENG	230	WRITG FOR BUS & TECH	3	An intensive course of instruction and practice in report writing, business writing, and technical writing. Emphasis is on the particular writing needs of each student.
ENGLISH	ENG	202	CREATIVE WRITING	3	Explores the fundamentals of creative writing through the use of writing exercises and the discussion of selected stories, poems, and creative essays. Emphasis will be placed on a portfolio of work submitted at the end of the semester.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ENGLISH	ENG	203	RDGS IN ANCIENT LIT	3	Introduction to some of the major characters, events, and ideas in the Greek, Roman, and Judeo-Christian mythologies that have so heavily influenced Western culture. (Mythology signifies the study of recurring patterns in thought and literature, not the separation of truth from fiction). >
ENGLISH	ENG	204	RDGS IN WORLD LIT	3	Selected readings from nineteenth and twentieth century world literature, excluding British and American. >
ENGLISH	ENG	313	COMPOSITION/LIT II	3	Study of significant literary texts which serve as a basis for serious, thoughtful, mature writing. Must be passed with a minimum grade of "C-" before graduation. Prerequisite: Junior standing, 64 credits earned. >
ENGLISH	ENG	333	ADVANCED COMPOSITION	3	Designed for proficient writers to enhance and improve their composing skills through intensive expository writing. Prerequisite: Eng 112 and 313 or permission of instructor. >
ENGLISH	ENG	309	SVY BRITISH LIT II	3	Survey of major British literature from the Romantics through the present. Prerequisite: Eng 112. to go to AAC F93 >
ENGLISH	ENG	305	COMPARATIVE LIT	3	Examines major works in a genre or movement, comparing two or more national literatures. Prerequisite: Eng 112. >
ENGLISH	ENG	307	LIT/ENG AROUND WORLD	3	A study of literature written in English outside of the British Isles and the United States. Prerequisite: Eng 112. to go to AAC F93 >
ENGLISH	ENG	320	CHANGE TOPIC	3	A specialized study of a topic in literature, film, or folklore. Cross-listed with WS 410. >
ENGLISH	ENG	401	CHANGE TOPIC	3	Specialized and in-depth study of a major writer, a small group of related writers, a particular genre, or a specific limited time period from either American or British literature. Prerequisite: Eng 112. >
ENGLISH	ENG	364	20TH CNTRY AMER LIT	3	Study of major American writers since World War I, such as O'Neill, Fitzgerald, Cather, Faulkner, Hemingway, Frost, Stevens, and Williams. Prerequisite: Eng 112. >
ENGLISH	ENG	311	SVY AMERICAN LIT II	3	A survey of late nineteenth and twentieth century American writers. Prerequisite: Eng 112. >
ENGLISH	ENG	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
ENGLISH	ENG	324	COMP THRY & PRACTICE	3	Analysis of current theories about the writing process and methods of applying these theories, with actual practice in tutoring writing. Prerequisite: Eng 112 and 313. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
ENGLISH	ENG	363	AMER REALISM&NATURAL	3	Study of major American writers between the Civil War and World War II, such as Dickinson, Twain, James, Chopin, Crane, Wharton, and Dreiser. Prerequisite: Eng 112. >
ENGLISH	ENG	350	OLD & MIDDLE ENG LIT	3	Examines major British writers and works from the Anglo Saxon period to 1500 such as Beowulf, "The Wanderer" and "The Seafarer;" a selection of Middle English lyrics; a mystery play, Everyman, Sir Gawain and the Green Knight or The Pearl; a selection of tales from Chaucer's The Canterbury Tales and Malory. Prerequisite: Eng 112. >
ENGLISH	ENG	352	SHAKESPEARE	3	Selected plays of Shakespeare with interpretation, evaluation, and attention to his development as a dramatist and poet. >
ENGLISH	ENG	359	VICTORIAN LITERATURE	3	Studies major British writers from 1830 to 1900, such as Dickens, G. Eliot, Tennyson, Browning, and Arnold. Prerequisite: Eng 112. >
ENGLISH	ENG	360	20TH CNTRY BRIT LIT	3	Study of major British writers of the twentieth century, such as Yeats, Eliot, Joyce, Lawrence, Shaw, Beckett, and Pinter. Prerequisite: Eng 112. >
ENGLISH	ENG	353	17TH CNTRY BRIT LIT	3	Examines major British writers from 1600 to 1660, focusing on such works as the religious lyric of Donne and Herbert; the philosophical prose of Browne, Bacon, and Hobbes; the Cavalier libertinism of Herrick, Carew, and Rochester; and the canon of Milton's work, especially Paradise Lost. Prerequisite: Eng 112. to go to AAC F93 >
ENGLISH	ENG	362	AMERICAN ROMANTICISM	3	Study of major American Romantic writers, such as Emerson, Poe, Hawthorne, Melville, and Whitman. Prerequisite: Eng 112. >
ENGLISH	ENG	382	THEORY OF LITERATURE	3	Survey of major critical approaches to literature. Prerequisite: Eng 112. to go to AAC F93 >
ENGLISH	ENG	312	INTRO FICTION WRITNG	3	Designed to help students find their true voice and true concerns as writers while mastering the essentials of the art. Emphasis is on writing exercises and then complete works, but also on becoming better readers. In-depth discussion of student work, the assigned readings, and the process of writing. Prerequisite: Eng 202 or permission of instructor. >
ENGLISH	ENG	314	INTRO POETRY WRITING	3	Designed to help students discover and develop their voices and styles as poets. Explore poetry writing through writing exercises, through reading and discussing poems written by contemporary poets, and through discussing one another's poems in a supportive atmosphere. Prerequisite: Eng 202 or permission of instructor. >
ENGLISH	ENG	308	SVY BRITISH LIT I	3	Survey of major British literature from Beowulf through Neoclassicism. Prerequisite: Eng 112. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ENGLISH	ENG	356	RESTOR&NEOCLS BR LIT	3	Major British writers from 1660 to 1800 such as Dryden, Swift, Pope, Gay, Fielding, and Johnson. Prerequisite: Eng 112. >
ENGLISH	ENG	411	ADV FICTION WRITING	3	Through writing exercises, reading the work of published writers, and workshopping original manuscripts, students will work on creating a portfolio of short fiction. Students will, also, learn how to market their work. Prerequisite: Eng 313 or permission of instructor. >
ENGLISH	ENG	412	ADV POETRY WRITING	3	Study of poetry by contemporary poets. Presentations will be made about poets of students choosing. Learn how to evaluate literacy markets, how to prepare a manuscript to be submitted for publication, and develop a chapbook of poets. Prerequisite: Eng 314 or permission of instructor. >
ENGLISH	ENG	414	CREAT NON-FICT PROSE	3	Students will write about subjects of interest and importance to them using literary techniques and devices. Will read and discuss a selection of book-length non-fiction works: memoirs, diaries, socio-political commentary, and nature writing. Writing techniques and exercises designed to stir creativity and stimulate ideas will be used. Prerequisite: Eng 312 or 314 or permission of instructor. >
ENGLISH	ENG	416	NOVEL WRITING	3	Students will read and discuss published novels and work on writing their own, critiquing and discussing one another's work. Includes the first three chapters and a synopsis of the novel. Prerequisite: Eng 312 or permission of instructor. >
BUS ADM	FM	304	CLTH PROD/DIST&CONSU	3	Studies the clothing field as an economic force. Analyzes fashion trends and their effect on production and distribution in manufacturing as these affect the consumer. >
BUS ADM	FM	305	STRUCT & PROP FIBERS	2	Studies the chemical and physical structures of fibers and the resulting properties. >
BUS ADM	FM	407	PROFESSIONAL SEMINAR	2	Prepares students to secure employment, to project a professional image in that position, and to advance in the company through leadership, management skills, networking, and effective office politics. >
BUS ADM	FM	408	PRESENTATION TECH	2	Emphasizes techniques of communication for the home economist in business. Evaluation of professional presentations and student presentations. Prerequisite: junior status. >
BUS ADM	FM	409	SEM & FIELD EXPER	4	Preparation for an experience in cooperative program with textiles, apparel, or retail business. >
BUS ADM	FM	202	FASHION MERCHANDISNG	3	Surveys buying and selling activities in fashion merchandising. Includes all aspects of planning, selecting, promoting, and evaluating merchandise of the fashion retailer. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
BUS ADM	FM	203	FUND OF CLOTH CONSTR	3	Introduces pattern and fabric selection, construction techniques, and methods of fitting garments. >
BUS ADM	FM	306	FABIRCS & FINISHES	3	Relationship of fiber structure, fabric structure, and finishing processes to fabric performance. Laboratory evaluation of performance characteristics of textile products. >
BUS ADM	FM	201	APPAREL DESIGN ANLY	3	Sketches fashion design for individual figure types. Studies principles related to fashion and display. Analyzes design in ready-to-wear, couture and specific needs. Surveys the fashion industry. >
FOR LANG	FR	101	INTRO FRENCH I	3	For beginning students and those with less than two years of high school French. Emphasis is on grammar, pronunciation drills, aural comprehension, speaking, reading, and writing with language lab. >
FOR LANG	FR	102	INTRO FRENCH II	3	Continuation of FR 101 with language lab. Prerequisite: Fr 101 or equivalent. >
FOR LANG	FR	201	INTERM FRENCH I	3	Reading texts, grammar review and further practice in aural comprehension, speaking, and writing with language lab. Prerequisite: two years of high school French or Fr 102. >
FOR LANG	FR	202	INTERM FRENCH II	3	Continuation of Fr 201 with language lab. Prerequisite: three years of high school French or Fr 201. >
FOR LANG	FR	205	PHONETICS & PRONUN	1	Systematic pronunciation drill and phonetic transcription. Prerequisite: Fr 102 or equivalent. >
FOR LANG	FR	300	CONVERSATNL FR & CIV	3	Designed to gain more fluency and develop writing skills. Examines socio-economic, political, and cultural topics. Prerequisite: Fr 202 or equivalent. >
FOR LANG	FR	305	ADV FR CONVERSATION	3	Continuation of Fr 300. Students make oral commentaries and write reports. >
FOR LANG	FR	306	TOPICS FR CIV (HST)	3	A brief survey of French history, with particular attention to major events and personalities. Prerequisite: FR 202 or equivalent. >
FOR LANG	FR	307	TOPICS FR CIV (GEOG)	3	A study of the geography of French-speaking countries. Prerequisite: FR 202 or equivalent. >
FOR LANG	FR	308	TOP FR CIV(AFR-FR LT	3	A study of Black literature written in French, Africa, and the West Indies. Prerequisite Fr 202 or equivalent. >
FOR LANG	FR	309	TOP FR CIV(CNTP PRB)	3	A study of the problems facing the people of French-speaking countries. Prerequisite: Fr 202 or equivalent. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	FR	310	BUSINESS FRENCH	3	An introduction to French business and its terminology: a broad study of the commercial procedures in France with a concentration on the acquisition of the necessary vocabulary. >
FOR LANG	FR	320	ADV FRENCH STRUCTURE	3	A final review of the structure of French and study of short literary tests. Prerequisite: Fr 202 or equivalent. >
FOR LANG	FR	330	SVY OF FRENCH LIT I	3	Selected readings of major French writers through the eighteenth century, outside readings and reports, literary movements, style and form. Prerequisite: Fr 202 or equivalent. >
FOR LANG	FR	331	SVY OF FRENCH LIT II	3	Selected readings of major French writers since 1800; outside readings and reports, literary movements, style and form. Prerequisite: Fr 202 or equivalent. >
FOR LANG	FR	339	FR LIT MIDAGE&RENAIS	3	Reading and discussion of the beginnings of French literature to the end of the 16th century. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	340	FRENCH CLASSICAL LIT	3	Critical readings and discussion of the major dramatic works of Corneille, Moliere and Racine with supplementary reading on general background. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	341	FR LIT OF ENLIGHTMNT	3	Reading and discussion of the works of Voltaire, Rousseau, and Diderot. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	342	CURRENTS 19 C FR LIT	3	The works of French authors as well as the main currents and form of literary expression from the beginning of Romanticism to the end of the century; Hugo, Balzac, Stendhal, Flaubert, and Zola. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	343	ASPECTS 20 C FR LIT	3	Development of the novel and modern French theatre: Gide, Alain-Fournier, Proust, Mauriac, Malraux, Sartre, Camus, Bernanos, St. Exupery, Green, and Ionesco. Reading and discussion of major works and a written report. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	350	DEV OF FRENCH POETRY	3	A study of the major works of poets from Villon to the present. Emphasis on interpretation and diction. Study of the French poetical system. Prerequisite: Fr 330 and 331 or permission of instructor. >
FOR LANG	FR	370	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	COURSE NUMBER TITLE	CR	COURSE DESCRIPTION
FOR LANG	FR	371 FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	372 FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	373 FOREIGN STUDY	0	Open to students who wish to continue the study of french abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	374 FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	375 FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
FOR LANG	FR	376	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	377	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	378	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	379	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.
FOR LANG	FR	380	FOREIGN STUDY	0	Open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Fr 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	FR	400	SENIOR SEMINAR	0	Special study projects in French language and literature; independent reading in the defined areas followed by written analytical reports in French. Open to seniors and in exceptional cases to juniors.
FOR LANG	FR	405	HONORS COURSE/FR MAJ	0	An individual problems course. Open to qualified seniors with consent of the department.
FOR LANG	FR	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.)
GEOG/GEOL	GEG	101	WORLD REGIONAL GEOG	3	Regional study of the world with special emphasis on the diversity of human existence and the world-scale problems currently faced.
GEOG/GEOL	GEG	102	HUMAN GEOGRAPHY	3	The human aspects of geography; the study of people and cultures as reflected in the way they use and modify our earth planet.
GEOG/GEOL	GEG	111	PHYSICAL GEOGRAPHY	3	Introduces the earth-science component of geography. Topics include: earth-sun relationships, weather and climate, vegetation and soils, and landforms.
GEOG/GEOL	GEG	222	ENV LAND&NAT RESOURC	3	Surveys a wide range of environmental issues. Topics include: natural hazards (earthquakes, floods, landslides, etc.), present and alternative energy sources, water resources and water pollution, waste disposal, soil erosion.
GEOG/GEOL	GEG	292	FIELD MTDS IN GEOG	3	Introduction to the tools and techniques of field investigation, observation, interviewing, sampling, and data collecting; analysis, recording, and presentation based on original field work is experienced.
GEOG/GEOL	GEG	312	WEATHER AND CLIMATE	3	Studies the basic concepts of meteorology and climatology; causes and consequences of climatic change, both natural and man-induced; weather maps, both surface and upper-level; and selected topics germane to current environmental issues.
GEOG/GEOL	GEG	321	GEOMORPHOLOGY	3	Studies the major theories of how landforms and fluvial systems develop. Some discussion of implications regarding human use of the terrain. Prerequisite: Geg 111 or Gel 121 or permission of instructor.
GEOG/GEOL	GEG	330	ADVANCED CARTOGRAPHY	4	Class-laboratory experience with the application and utilization of modern tools and techniques of cartography and graphics. Emphasis on map design and reproduction.
GEOG/GEOL	GEG	330L	ADV CARTOGRAPHY LAB	0	advanced cartography lab
GEOG/GEOL	GEG	300	GEOGRAPHIC RESEARCH	3	An introduction to the various approaches and methods involved in identifying and developing satisfactory solutions to geographic problems.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	GEG	320	CARTOGRAPHY	4	The principles and tools of basic cartography. Emphasis on map projections, mapdesign, and map reproduction. >
GEOG/GEOL	GEG	350	URBAN GEOGRAPHY	3	Analysis of the localization, structure, and function of urban settlements and their supporting areas. >
GEOG/GEOL	GEG	351	POPULATION GEOGRAPHY	3	Studies the spatial aspects of world population numbers, densities, and qualities; emphasizing the economic and social characteristics and mobility of the worlds population. >
GEOG/GEOL	GEG	362	ECO GEG SRV&RETL ACT	3	Studies the geographic theory and practical implications of consumer service-oriented economic activities. >
GEOG/GEOL	GEG	363	URBAN LAND USE DEV	3	Studies the spatial patterns of urban land use with an emphasis on the theories and practices of real estate development. >
GEOG/GEOL	GEG	364	TECHNIQUES GEOG MEAS	3	An introduction to the methods of geographic measurement, such as data-gathering and statistical-computerized analysis. Intended to familiarize students with more advanced methodologies of geographic research. >
GEOG/GEOL	GEG	331	WRLD OF MAPS/MAPPING	3	A map reading and interpretation course. Covers fundamentals such as scale, contour lines, location systems, and projections. Emphasizes topographic maps, but examines many other types as well. Additional topics include: elementary surveying techniques, plan table mapping, and use of a compass. >
GEOG/GEOL	GEG	360	ECONOMIC GEOGRAPHY	3	Relates modern methods of geographic analysis to the study of population, resources, primary and secondary production, tertiary and quaternary activities, and international trade. >
GEOG/GEOL	GEG	370	POLITICAL GEOGRAPHY	3	An analysis of the geographical nature, policy, and power of the state. Topics include: the growth and development of states, boundary problems, population distribution, colonies, and political-geographical theories. >
GEOG/GEOL	GEG	371	HISTORICAL GEOGRAPHY	3	The human geography of the past. Topics include: the characteristics of colonization and the resulting cultural landscape. Special reference is made to the historical geography of the United States. >
GEOG/GEOL	GEG	372	AERIAL PHOTO INTERP	3	Studies how to interpret and make accurate measurements from aerial photographs. Emphasizes geologic aspects but covers land-use mapping, crop identification, and other topics. Prerequisite: Geg 111 or Geg 121 recommended. >
GEOG/GEOL	GEG	380	GEOG OF U S & CANADA	3	An analysis of the physical and human aspects of the United States and Canada. Particular emphasis on regionalism and regional problems. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	GEG	381	GEOG OF PENNSYLVANIA	3	Analysis of the regional patterns of Pennsylvania. Topics include: topography, climate, waters resources, mineral resources, and the historical development of economic regions within the State. >
GEOG/GEOL	GEG	390	RGNL ANLY/WRLD AREAS	3	Regional study of selected areas, with special emphasis on the areas human and physical characteristics and related, contemporary issues. >
GEOG/GEOL	GEG	402	ADV HUMAN GEOGRAPHY	3	A systematic study of the approaches, concepts, and methods of human geography. Emphasis is given to man-environmental systems and the spatial patterns of human behavior within a thematic framework. >
GEOG/GEOL	GEG	412	GLACIAL GEOLOGY	3	An analytical study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. Prerequisite: Gel 121. >
GEOG/GEOL	GEG	415	SPECIAL PROBLEMS	2	Offers extensive field experience and the opportunity to observe first-hand a variety of natural and human processes and phenomena. >
GEOG/GEOL	GEG	430	MDN CARTOGRAPHIC TECH	0	Advanced elements of map design and reproduction. Emphasis is on contemporary media used in presenting quantitative data organized into three modules: 1) "Computer Mapping", no prerequisite, 1) "Thematic Maps", and 3) "Practicum", prerequisite: Geg 230. >
GEOG/GEOL	GEG	420	REMOTE SENSING	3	Examines color and color infrared aerial photography as well as Landsat, SPOT, Thermal and Radar imagery. Emphasis is on computer processing of Landsat data. Prerequisite: Geg 331 and/or Geg/Gel 372 recommended. >
GEOG/GEOL	GEG	465	SEMINAR ENVIRON SCI	1	An upper-level seminar that integrates and applies concepts and skills taught in the basic courses of the Environmental Science emphasis. >
GEOG/GEOL	GEG	470	WORLD PROBLEMS GEOG	0	Regional treatment of man-land environmental problems approached from various geographical points-of-view. >
GEOG/GEOL	GEG	496	INTERNSHIP	3	Offers practical work experience and the opportunity to apply and further develop skills taught in the Geography Department. Prerequisite: permission of instructor. >
GEOG/GEOL	GEG	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
GEOG/GEOL	GEG	498	SENIOR SEMINAR	3	The history and philosophy of modern academic geography. Prerequisite: geography major with junior or senior class standing. >
GEOG/GEOL	GEG	499	HONORS COURSE	3	Designed for upper-division students who qualify for independent research which will be conducted under the direction of a department faculty member. Prerequisite: 18 hours in upper-level geography with at least a "B" average. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	GEL	101	EARTH RESOURCE&ENERGY	3	Deals with our natural resources, metallic, non-metallic, and fossil fuels. Points include the worldwide abundance and distribution of the resources and the economics of the extractive industries. The fossil fuels, of finite supply, lead in to alternative sources of energy and their feasibility.
GEOG/GEOL	GEL	102	ENVIRONMENTAL GEOL	3	The relationship of man to his environment will be examined with particular emphasis to problems of natural hazards (earthquakes, flooding, landslides), construction, ground water management, resources, utilization, impact mitigation and geological planning.
GEOG/GEOL	GEL	121	PHYSICAL GEOLOGY	3	A study of the solid portion of the earth, the materials of which it is composed and the processes which are acting on it. Included are such topics as rocks and minerals, weathering, and geologic structure.
GEOG/GEOL	GEL	121L	PHYSICAL GEOLOGY LAB	0	physical geology lab
GEOG/GEOL	GEL	122	HISTORICAL GEOLOGY	3	A study of earth history using the principles of GEL 121. Includes theories of earth origin, fossils, geologic time, and the various techniques used to unravel geologic history.
GEOG/GEOL	GEL	122L	HISTORICAL GEOL LAB	0	historical geology lab
GEOG/GEOL	GEL	321	GEOMORPHOLOGY	3	Studies major theories of how landforms and fluvial systems develop. Some discussion of implications regarding man's use of the terrain. Prerequisite: Geg 111 or Gel 121 or permission of instructor.
GEOG/GEOL	GEL	351	STRUCTURAL GEOLOGY	3	The analysis of geologic structures and their casual mechanism is approached through applied physics and mathematics. Understanding of the simple geologic structures leads into the worldwide tectonic pattern and the concept of plate tectonics. Prerequisite: permission of instructor.
GEOG/GEOL	GEL	352	STRATIGRAPHY	3	An extensive study of the genesis and distribution of the sedimentary rocks and the reconstruction of the paleo-environment. Sedimentary processes and environments of deposition will be studied through detailed analysis of reference sections using the principles of correlation, facies change, tectonics, and paleontology. Prerequisite: permission of instructor.
GEOG/GEOL	GEL	352L	STRATIGRAPHY LAB	0	stratigraphy lab
GEOG/GEOL	GEL	361	SEDIMENTATION	3	An introduction to the analysis of sediments and sedimentary rocks, their classification, erosion, transportation and deposition. Paleoenvironmental analyses are made.
GEOG/GEOL	GEL	371	PETROLOGY	3	A rigorous course in the identification of igneous, sedimentary and metamorphic rocks both in hand specimens and microscopically. The spatial and temporal distribution of the various rock types is related to plate tectonic theory.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	GEL	341	PALEONTOLOGY	3	A detailed study of the fossil remains of animals. Special emphasis is given to the methods of studying fossils, the structures by which the fossils are identified, similarities of fossils to living organisms, and the significance of fossils. >
GEOG/GEOL	GEL	341L	PALEONTOLOGY LAB	0	paleontology lab >
GEOG/GEOL	GEL	372	AERIAL PHOTO INTERP	3	Studies how to interpret and make accurate measurements from aerial photographs. Emphasizes geologic aspects but covers land use mapping, crop identification, and other topics. Prerequisite: Geg 111 or Gel 121 are recommended. >
GEOG/GEOL	GEL	401	FIELD TECH IN GEOL	3	A field-oriented course where the student learns actual data collection methods. Methods vary with the problem, but include planning field work, identifying and measuring all parameters of the outcrop and sampling techniques. Different surveying methods are used in locating outcrops. Interpretation of the field data is an integral part of the course. >
GEOG/GEOL	GEL	412	GLACIAL GEOLOGY	3	An analytical study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. Prerequisite: Gel 121. >
GEOG/GEOL	GEL	421	PETROLEUM GEOLOGY	3	An introduction to the origin, migration, and accumulation of petroleum; reservoir rocks and traps; methods of exploration, evaluation, and extraction. >
GEOG/GEOL	GEL	421L	PETROLEUM GEOL LAB	0	petroleum geology lab >
GEOG/GEOL	GEL	332	MINERALOGY	3	A detailed study of minerals emphasizing their composition, origin, mode of occurrence, alteration, classification, and identification. Prerequisite: one year of college chemistry, which may taken concurrently. >
GEOG/GEOL	GEL	332L	MINERALOGY LAB	0	mineralogy laboratory >
GEOG/GEOL	GEL	451	PALEOECOLOGY	3	An introduction to interpretation of past environments of deposition through analysis of fossil organisms, their distribution and relation to sediments. >
GEOG/GEOL	GEL	465	SEMINAR ENVIRON SCI	1	An upper-level seminar that integrates and applies concepts and skills taught in the basic courses of the Environmental Science emphasis. >
GEOG/GEOL	GEL	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	GEL	420	REMOTE SENSING	3	Examines color and color infrared aerial photography as well as Landsat, SPOT, Thermal and Radar imagery. Emphasis is on computer processing of Landsat data. Prerequisite: Geg 331 and/or Geg/Gel 372 recommended. >
FOR LANG	GER	101	INTRO GERMAN I	3	For beginning students and those with less than two years of high school German. Elements of structure, reading and writing, intensive drill in pronunciation, aural comprehension, speaking, and language laboratory are examined. >
FOR LANG	GER	102	INTRO GERMAN II	3	Continuation of GER 101 with language lab. Prerequisite: Ger 101 or equivalent. >
FOR LANG	GER	201	INTERM GERMAN I	3	A review of the structure of the German language with additional emphasis on listening comprehension, speaking, reading, and writing. Prerequisite: two years of high school German, Ger 102 or equivalent. >
FOR LANG	GER	202	INTERM GERMAN II	3	Continuation of GER 201. Increased emphasis on the development of the four language skills, using materials taken from actual cultural and literary selections. Prerequisite: three years of high school German, Ger 201 or equivalent. >
FOR LANG	GER	205	PHONETICS & PRONUN	1	A study of German phonetics, phonemics, pronunciation, intonation, and rhythm. The theory of the speech and articulatory mechanisms will be studied; extensive practice exercises. Prerequisite: Ger 102 or equivalent. >
FOR LANG	GER	300	CONVERSATNL GERMAN	3	Intensive oral practice in German for the development of a higher degree of fluency in the spoken language. Emphasis on topics of cultural, social, economic, and political nature. Prerequisite: Ger 202 or equivalent. >
FOR LANG	GER	305	ADV GER CONVERSATION	3	Intensive development of oral expression for students desiring a higher level of oral fluency. Emphasis is on enabling the student to carry on discussion in more detail and giving oral reports. Prerequisite: Ger 202 or equivalent. >
FOR LANG	GER	320	ADV GER STRUCTURE	3	Study and practical application of the German structural patterns with concentration on the morphology and syntax of the language. Prerequisite: Ger 202 or equivalent. >
FOR LANG	GER	321	COMP AND STYLISTICS	3	Development of self-expression in writing. Emphasis is on synonomous development of expression and stylistic writing. Frequent written assignments and at least one significant written assignment of a critical nature. Prerequisite: Ger 202 or equivalent and recommendation of instructor. >>
FOR LANG	GER	330	SVY OF GERMAN LIT I	3	Designed to acquaint the student with the major literary movements and representative writers of German literature from 1750. Prerequisite: Ger 202 or equivalent. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	GER	331	SVY OF GERMAN LIT II	3	Sequel to GER 330. A cross section of literary movements and significant writers from the earliest periods through 1750. Prerequisite: Ger 202 or equivalent. Ger 330 is recommended.
FOR LANG	GER	335	DEUTSCHLANDKUNDE	3	Deutschlandkunde. Prerequisite Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	336	LAENDER UND STAEDTE	3	Laender und staedte. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	337	20TH CENTURY GER LIT	3	20th century German literature. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	338	19TH CENTURY GER LIT	3	19th century German literature. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	341	CHANGE TOPIC	3	Selected topics
FOR LANG	GER	360	GER CULTURAL HISTORY	3	german cultural history. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	361	18TH CENTURY GER LIT	3	18th century german literature. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	362	GERMAN LYRIC POETRY	3	german lyric poetry. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	363	THE GERMAN NOVELLE	3	the german novelle. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	364	GERMAN DRAMA	3	german drama. Prerequisite: Ger 202 or equivalent. Ger 320 preferred.
FOR LANG	GER	370	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
FOR LANG	GER	371	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	372	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	373	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	374	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	375	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	GER	376	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	377	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	378	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	379	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	GER	380	FOREIGN STUDY	0	Open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Ger 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
FOR LANG	GER	400	CHANGE TOPIC	3	Selected topics from the following list, or other topics upon arrangement. Topics: Heinrich Boll, Bertolt Brecht, Heinrich Heine, Friedrich Duerrenmatt, Johann Wolfgang von Goethe, Friedrich Schiller, Gunter Grass, Max Frisch and Hermann Hesse. Prerequisite: Qualified student with senior standing or junior standing by permission of instructor.
FOR LANG	GER	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.)
HOME EC	HEC	121	PERSONAL&FAMILY MGMT	3	Management of human, economic, and environmental resources as related to human needs, values, and goals. Exploration of decision-making, life styles, roles, and aspirations of family members.
HOME EC	HEC	131	INTRO CHILD & FAMILY	3	Introduces the student to human development and family studies as an academic discipline. Emphasizes stages of development throughout the life cycle.
HOME EC	HEC	211	FUNDS OF NUTRITION	3	A study of the food nutrients and their utilization by the body in relation to total health of persons of all ages. The influence of socio-economic factors and availability of food as they affect the nutritional status of people throughout this nation and the world.
HOME EC	HEC	224	HOUSEHOLD EQUIPMENT	2	Selection, use, care, testing, and evaluation of household appliances and equipment.
HOME EC	HEC	231	FIRST YEARS CHLDHOOD	3	Studies the child from conception to age five. Emphasizes social, emotional, physical, psychomotor, and intellectual growth and development. Includes observation and participation.
HOME EC	HEC	231L	FIRST YRS CHLDHD LAB	0	First years of childhood lab
HOME EC	HEC	232	THE AMERICAN FAMILY	3	Studies courtship patterns, marital interaction, and nuclear and extended family relationships in contemporary america. Emphasizes past and current trends in marriage and family life and in family studies as an academic discipline. Prerequisite: Hed 131 or permission of instructor.
HOME EC	HEC	301	INTERMEDIATE CLOTHNG	3	Emphasizes construction techniques related to fabrics and fit. Introduces speedtailoring techniques.
HOME EC	HEC	303	TAILORING	3	Emphasizes the difference between custom and speed tailoring, the selection of tailoring fabrics and their relationship to design. Prerequisite: Hec 201.
HOME EC	HEC	310	INTRO HOSPITAL INDUST	3	A survey of the food and lodging industry in terms of functions, terminology, and issues. Evaluation of food and lodging facilities. An introduction to management thought and its application to the hospitality industry.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HOME EC	HEC	321	CONSUMER ECONOMICS	3	Introduction to the consumer's role in American society. Course focus is on individual decision making and the knowledge necessary for best achieving satisfaction based on personal goals and value system. The course features tactics and techniques for consumer survival. Prerequisite: junior standing or permission of instructor.
HOME EC	HEC	323	INTERIOR ENVIRONMENT	3	Emphasizes housing in relation to individuals and families. Studies current housing trends, governmental influences, housing alternatives, design, interiors, and energy factors. Housing related laboratory projects focus on development of skills for professional and personal use.
HOME EC	HEC	323L	INTERIOR ENVIRON LAB	0	Interior environment lab
HOME EC	HEC	330	CHILD & FAM AGENCIES	3	Familiarizes the student with various agencies and programs that serve children and families. A one-day observation experience is provided. Prerequisite: Hec 232, Soc 232 or permission of instructor.
HOME EC	HEC	332	THE ADOLESCENT	3	Studies adolescents and their development in relation to personality, family, education, and the social order. Emphasizes physiological, sociological, and psychological characteristics and needs. Examines selected current issues.
HOME EC	HEC	333	PARENT-CHILD STUDY	3	Focuses on the development of the parent-child relationship. Discusses issues pertaining to the couple's decision to parent, adapting to parenthood, and parental-child interaction. Introduces the student to programs to enhance parenting and the child's development. Includes observation and participation experiences.
HOME EC	HEC	333L	PARNT/CHLD STDY LAB	0	Parent/child study lab
HOME EC	HEC	334	CONTMP ISSU FAM STDS	3	Examines current issues and trends under debate in the field of family study. Emphasizes both theoretical and practical concerns of those studying and serving families. Utilizes seminar format including student presentations of library research.
HOME EC	HEC	335	PLAY&CREATV ACT CHLDS	3	Emphasizes contributions of play and creative activities in physical, emotional, social, and intellectual development. Provides the opportunity to exercise ingenuity to devise play and creative activities in a variety of situations.
HOME EC	HEC	335L	PLAY&CREA ACT CH LAB	0	Play and creative activities in childhood lab
HOME EC	HEC	336	ADULTHOOD AND AGING	3	Studies adult development from end of adolescence until death. Emphasizes normal aging and potential stresses associated with the aging process. Considers aging within the family and the larger social context. Introduces the student to programs and services for the elderly adult. Provides an opportunity for observation and participation. Prerequisite: Hec 131, Psy 290 or permission of instructor.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HOME EC	HEC	390	OBSERV & PARTICIPATN	3	Application of concepts and techniques learned in HEC 391 while observing and participating in a variety of teaching learning situations including: nursery and elementary schools, day care centers, programs for the elderly, co-operative extension programs, and classes for students with special needs. Prerequisite: Hec 391 or permission of instructor.
HOME EC	HEC	390L	OBSERV & PARTIC LAB	0	Observation and participation in educational settings lab
HOME EC	HEC	391	TCHG HOME ECON I	3	The first course in the home economics education sequence. Primary focus is planning for the teaching of home economics content areas. Emphasizes methods, techniques and use of resources for teaching. Simulation and micro-teaching are utilized for implementation of lesson planning. Prerequisite: Psy 230 or permission of instructor.
HOME EC	HEC	392	TCHG HOME ECON II	3	Emphasizes philosophical basis for program and curriculum development for home economics program. Includes selection of learning experiences and resource materials relevant to unit and lesson planning. Provides for development of personal teaching philosophy and style of teaching. Studies current legislation and family issues. Discipline and evaluation. Prerequisite: Hec 390 and 391 or permission of instructor.
HOME EC	HEC	400	STUDENT TEACHING	**	Opportunity to apply knowledge and skills acquired in professional preparation through a field experience in university established centers under the supervision of a certified cooperating teacher. Observations and conferences are scheduled by the university supervisor. Prerequisite: Hec 392.
HOME EC	HEC	403	FLAT PATTERN DESIGN	3	Using flat pattern methods to create new pattern and alter commercial patterns. Applies principles to fit.
HOME EC	HEC	404	CREATIVE DRAPING	3	Creates designs for the individual using basic techniques, varies basic designs and creates original designs.
HOME EC	HEC	421	HSULD EQUIP&HOME MGT	3	Provides for in-depth study of household equipment including experiments testing equipment features. Studies theories and processes necessary to management of the home.
HOME EC	HEC	421L	HSULD EQ&HOME MG LAB	0	Household equipment and home management lab
HOME EC	HEC	423	INTERIOR DSG IN HOME	3	Emphasizes principles of design and elements of art in relation to home interiors, environment, personal taste and personality. Laboratory experiences include planning and developing interior designs using professional techniques. Related skill projects are required.
HOME EC	HEC	423L	INTER DSGN HOME LAB	0	Interior design in the home lab

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HOME EC	HEC	424	HANDICAPPED HOMEMAKR	3	Identification and analysis of various handicaps which influence ability to manage daily life tasks. Exploration of techniques for work, storage, and organization to achieve more independent living. >
HOME EC	HEC	425	PRSNL & FAM FIN MGMT	3	Studies financial planning for individuals and families over a lifetime which includes money management techniques useful in accomplishing ones personal and family financial goals. Prerequisite: Hec 321 or permission of instructor. >
HOME EC	HEC	429	INTERNSHIP:FOOD SERV	3	An approved practicum in the student's area of interest in the field of food service management. Prerequisite: senior standing. >
HOME EC	HEC	435	TCHG IN THE PRESCHL	3	Offers directed work in selected preschool settings with opportunities to apply principles of guiding children in preschool groups. Covers principles of preschool group management including: management of space, equipment, and supplies; planning; funding and regulations; working with parents and community. Prerequisite: Hec 231 or permission of instructor. >
HOME EC	HEC	437	ADV CHILD DEVELOPMNT	3	Studies development of the child from prenatal to adolescence. Emphasizes current research and theory. Prerequisite: Hec 231, Ele 350 or permission of instructor. >
HOME EC	HEC	438	ADV FAMILY RELATIONS	3	Explores internal functioning of family life including theoretical considerations and the impacts of the larger society on family dynamics. Considers policy issues and the amelioration of family problems. Prerequisite: Hec 232, Soc 232, Psy 210 or permission of instructor. >
HOME EC	HEC	439	INTERNSHIP:CHLD&FAM	**	The student participates in a supervised twelve to fifteen week field placement with a community agency appropriate to the student's interests. Examples of agencies and programs utilized include early childhood and day care, general so-cial services, children's services, family planning, county extension, adoles- cent programs, and gerontological services. Prerequisite: senior. >
HOME EC	HEC	485	TEACHING OF ADULTS	3	Designed to identify characteristics and needs of various target groups choosing or needing to be involved in educational offerings for adults. Explores lifelong learning as a phenomenon relative to many societal influences, and develop programs, teaching modules, and units which serve both society and the individual. Dual listed with 585. >
HOME EC	HEC	494	VOCATNL & CAREER EDU	3	Focuses on home economics related to vocational education and career education. Identifies federal and state vocational legislation mandates. Examines employment opportunities provided for secondary home economics students through vocational programs. >
HOME EC	HEC	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HONORS	HON	100	HUMANITIES HONORS I	3	Introduction to the humanities by means of an interdisciplinary content drawn from literature, philosophy, theatre, music, art, and history. >
HONORS	HON	101	HUMANITIES HONORS II	3	Continuation of HON 100. >
HONORS	HON	201	SOCIAL SCI HONORS	3	Introduction to the nature of scientific thought as applied in the social sciences. The world view common to the social sciences or the particular methodology of one of the basic social sciences will be examined. >
HONORS	HON	255L	CHANGE TOPIC LAB	0	special project laboratory. >
HONORS	HON	497	INDEPENDENT STUDY	0	A full-length project in a students major, involving the perspective of at least one other academic discipline. The project is supervised by a professor chosen by the student in collaboration with the Honors director. The project may be of a research, experimental, or performance nature and will be geared towards a formal presentation of its results to the students and faculty of the Honors Program. >
HPE	HPE	100	HEALTH(PERSNL&COMUN)	2	Includes health services, health instruction, and health environment dealing with contemporary principles, practices, and concepts serving personal, family, and community health. >
HPE	HPE	101	BEGINNING SWIMMING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	102	BEGINNING BOWLING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	103	BEGINNING TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	104	BEG BADMINTON&TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	105	BEG BADMINTON & GOLF	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	106	BEGINNING ARCHERY	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >

DEPARTMENT	PREFIX NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HPE	HPE 107	BEGINNING BILLIARDS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 108	BEGINNING RACQUETBAL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 109	BEGINNING SKIING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 110	BEGINNING GOLF	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 111	BASIC HORSEMANSHIP	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 112	TUMBLING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 113	SOFTBALL&VOLLEYBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 114	ARCHERY & VOLLEYBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 115	CONDITION&BODY AWARE	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 116	BASKETBALL & SOCCER	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 117	BADMINTON&RACQUETBAL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE 118	RACQUETBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HPE	HPE	119	AEROBIC AQUATICS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	120	BADMINTON & TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	121	SOFTBAL-CONDITIONING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	122	COND&WEIGHT TRAINING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	123	BADMINTON&VOLLEYBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	124	GYMNASTICS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	125	FLD HOCKEY&RACQUETBL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	126	FIELD HOCKEY	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	127	BEG GOLF & VOLLEYBAL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	128	AEROBIC CONDITIONING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >>
HPE	HPE	129	ARCHERY	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	130	GOLF	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HPE	HPE	131	WALK LIFE FITNESS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	132	HYDRO AEROBICS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	133	TRAIL RIDING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	134	BILLIARDS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	135	RACQUETBALL & TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	136	RECREA SWIMMING ACT	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	137	TENNIS & VOLLEYBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports.. >
HPE	HPE	138	TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	139	SOFTBALL&VOLLEYBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	140	RACQUETBALL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	141	BADMINTON&RACQUETBAL	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	142	BADMINTON & TENNIS	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HPE	HPE	143	INTERM SWIMMING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	144	INTERMEDIATE SKIING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	145	INTERM TENNIS&VOLLEY	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	146	INTERMEDIATE BOWLING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	147	ADV BEGIN SWIMMING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	148	ADVANCED SWIMMING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	149	LIFEGUARD TRAINING	1	Designed to provide necessary minimum skills for a person to serve as a non-surf lifeguard. Reading, throwing, wading and swimming rescue techniques. American Red Cross certification upon successful completion. Prerequisite: current Standard First Aid and Adult CPR certification. >
HPE	HPE	150	SENIOR LIFE SAVING	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	151	ADVANCED BADMINTON	1	Serves the individual with little or no experience in the activity selected. Emphasis on beginner-level fundamental skills in seasonal activities for individual, dual, and team sports. >
HPE	HPE	164	AEROBIC CONDITON&CPR	1	Foundations, design, and evaluation of individualized aerobic conditioning programs with a variety of activities and American Red Cross Community CPR. >
HPE	HPE	203	PHYSICAL EDUCATION	1	Serves the individual with prior experience in the activity selected. Skills are evaluated and advanced skills and strategies utilized for the individual, dual, and team sports. >
HPE	HPE	205	INTERCOLLEGIATE ATHL	1	Course is designed as an upper-level skill class available only to individuals on varsity teams. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HPE	HPE	206	ATHLETIC TRNG LAB I	1	An in-depth examination of the organization and administration of athletic training for the student seeking NATA certification. Clinical hours will be required to meet NATA standards. Prerequisite: Athletic training area of concentration and two semesters of experience as a student trainer. >
HPE	HPE	207	ATHLETIC TRNG LAB II	1	Examines all of the major muscles and the procedure for testing for injury to those muscles. Provides clinical work under the direct supervision of a licensed NATA certified trainer. Prerequisite: HPE 206. >
HPE	HPE	225	WATER SFTY INSTRUCTN	2	Provides students with the practical experience and knowledge needed to teach swimming beginning at the non-swimmer level up to advanced senior life saving. Prerequisite: completion of advanced life saving. >
HPE	HPE	300	COACH TRACK & FIELD	3	Participation in actual training techniques in track and field. Planning and organizing equipment for a track program will be studied. >
HPE	HPE	305	COACH&OFFIC WRESTLNG	3	Practical training in wrestling fundamentals, strategy and the psychology of coaching, fundamentals of officiating, rule interpretation and preparation. >
HPE	HPE	310	SPECIAL PE/EXCP CHLD	3	A comprehensive analysis of the physically, emotionally, and socially handicapped student. Includes selected activities and achievement standards in the field of health, physical education, and athletics. >
HPE	HPE	315	ATHLETIC TRAINING	3	Designed to provide experience in the application of various methods of treatment to athletic injuries. A study of preventive measures and medical management of athletic injuries. >
HPE	HPE	320	BASIC FOOTBALL	3	Examines the methods, techniques, and psychology used in coaching football. Provide the prospective coach with knowledge of the personal problems in motivating and handling individual players. >
HPE	HPE	330	COACHING BASKETBALL	3	Practical training in the areas of basketball fundamentals, individual and team play, strategy, and the psychology of coaching. >
HPE	HPE	340	FIRST AID AND CPR	3	Theory and application of the methods, techniques, and psychology used in first aid and safety. Basic, multi-media, SFAPS and CPR certification included. >
HPE	HPE	341	ADV 1ST AID&CPR RCRT	3	To provide advanced skills and knowledge when responding to first aid situations: to certify instructors where there is a need for basic first aid, multi-media first aid, and standard first aid and personal safety; to recertify current first aiders. >
HPE	HPE	350	TCHG HPE IN ELEM SCH	2	Principles, problems, materials, and techniques for conducting the health and physical education programs in the elementary schools. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HPE	HPE	360	KINESIOLOGY	3	Analysis of human motion based on anatomical and mechanical principles. Applications of mechanics to sports activity. Prerequisite: Bio 331 and 332. >
HPE	HPE	370	PHYSIOLOGY EXERCISE	3	Critical analysis of physiological bases of muscular activity with special attention to general effects of exercise on body function. Prerequisite: Bio 331, 332 and HPE 360. >
HPE	HPE	375	ADV ATHLETIC TRAINING	3	An in-depth study of detailed orthopedic evaluation of injuries to athletes. Rehabilitation of specific major joints from post-op to competition will be studied. Prerequisite: HPE 206, 207 and 315. >
HPE	HPE	375L	ADV ATHL TRNG LAB	0	See Advanced Athletic Training. >
HPE	HPE	376	ATHL TRNG LAB III	1	Examines the therapeutic modalities commonly used in the field of athletic training. Students in the area of concentration will be required to perform clinical work under the direct supervision of a licensed NATA certified athletic trainer. Prerequisite: HPE 206 and 207. >
HPE	HPE	377	ATHL TRNG LAB IV	1	The use and misuse of prescription and non-prescription medication in athletics today. The student will be required to perform clinical work under the direct supervision of a licensed NATA certified athletic trainer. Prerequisite: HPE 376 >
HPE	HPE	390	COACHING BASEBALL	3	Provides the knowledge, skills, and attitudes to prepare students to coach high school baseball programs dealing with organizational factors of coaching as well as the strategies and skills of the game. >
HPE	HPE	420	HUMAN BEHAV IN COACH	3	Designed for the experienced coach as well as the future coach to acquire a better understanding of the most important and least understood aspect of athletics. Includes appropriate techniques to teach athletics to consciously affect motivational processes. >
HPE	HPE	497	INDEPENDENT STUDY	0	medieval art in england and italy >
HISTORY	HST	101	WESTERN CIV I	3	A survey of significant ideas, events, and cultural developments in Western history from the emergence of ancient civilization to early modern times (circa 1660). >
HISTORY	HST	102	WESTERN CIV II	3	A continuation of HST 101, beginning with the early modern times to the present, including the political, economic, and social forces which affect our world today. >
HISTORY	HST	104	WORLD 20TH CENTURY	3	A study of the forces and concepts operating in the modern world with emphasis on the trouble spots at the present time. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HISTORY	HST	201	AM HIST THRU CIV WAR	3	A survey of American history covering the 17th-century colonization; independence and formation of the federal union; nationalism, sectionalism and growth of democracy in the 19th century; and the Civil War. >
HISTORY	HST	202	AM HST-RECON TO PRES	3	A continuation of HST 201, covering significant trends and events in the rise of modern industrial America, its emergence as a world power and events through the 1980's. >
HISTORY	HST	205	HST OF SPORTS IN AM	3	Topics include: evolution of major sports, influence of organization and technology, critics of sports, racism, a comparison with sports in other countries, the role of women and labor relations within sports, sports in the school, and various sports heroes. >
HISTORY	HST	210	HERSTORY	3	Explores the life stories, experiences, and thoughts of American women 1607-present. Themes are changing expectations of women and men in society, women in the labor force, and the equal rights movement. >
HISTORY	HST	220	WORLD WAR II	3	The origin, background, and course of World War II and its effects upon world affairs. Deals with battles and the scientific, psychological, political, and economic impact of the war. >
HISTORY	HST	225	INTRO TO AM MIL HST	3	We trace the American military experience from its European origins to the present time. The evolution of U.S. military history is examined along institutional and operational lines with emphasis on land warfare. Selected lessons complement this focus by showing developments in naval and air warfare, and by examining major trends in European military history. >
HISTORY	HST	232	AZTECS/INCAS/MAYAS	3	A study of the achievements, values, and organization of three Indian societies before the arrival of Columbus. Covers a number of multi-disciplinary topics including the nature of societal evolution, the benefits of alternative systems of government and justice, the purpose of polytheistic religions, and the reasons for the decline of a civilization. >
HISTORY	HST	250	EAST EUROPEAN HIST	3	East European cultures, peoples, and states, with emphasis on the rise and development of national consciousness (1800-1950). >
HISTORY	HST	288	EASTERN RELIGIONS	3	Major religions of Asia-Islam, Buddhism, Hinduism, and Confucianism, the basic beliefs, duties, and effects of these religions on Asian culture are explored. >
HISTORY	HST	295	CHANGE TOPIC	0	A special area that is of current interest. >
HISTORY	HST	300	HISTORIOGRAPHY	3	Introduces the student to the discipline, methods, and techniques of historical research and writing. Examines the major interpretations of history and historiographical writings. Prerequisite: one history course or permission of instructor. >>

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HISTORY	HST	301	HST COLONIAL AM/1788	3	The exploration and settlement of North America with emphasis on the English colonies and their political, social, and economic developments. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	302	CNSTITUTN MNFST DSTN	3	The movement for American independence and events during the Revolutionary War and early national period. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	304	CIVIL WAR & RECONST	3	Sectional controversy; constitutional issues, secession and military conflict; the aftermath of the war, North and South, with emphasis on political development during reconstruction ending. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	306	AMERICA BETWEEN WARS	3	American politics, diplomacy and society in World War I, the nervous Twenties, the Depression Decade, and World War II. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	307	CONTEMPORARY AMERICA	3	American political, diplomatic, and social developments in the Atomic Era. Watergate, Viet Nam and Civil Rights are key points studied. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	310	AFRO-AMER EXPERIENCE	3	African heritage, Atlantic slave trade, American slavery, Civil War and Reconstruction, segregation and disfranchisement, the Harlem Renaissance, and Black Revolution, black resistance, and the quest for a black identity. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	315	HST OF SOC WELFARE	3	The development of the public welfare systems as a mirror reflecting Americans' changing attitudes toward misfortune and relief. Centers upon a central issue of historical evaluation and contemporary policy: the appropriate balance between assistance-security and work-independence objectives in public welfare efforts. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	340	THE ANCIENT WORLD	3	Growth and development of cultural, social, and intellectual foundations that formed the basis of our present institutions. Classical life and thought will be analyzed through a study of the great civilizations of Greece and Rome. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	345	MIDDLE AGES	3	The political, socio-economic, and cultural development of the civilization of Medieval Europe from the fall of Rome to the Medieval synthesis in the High Middle Ages. Prerequisite: one history course or permission of instructor. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
HISTORY	HST	346	RENAISSANCE & REFORM	3	Political, social, economic, and cultural forces involved in the transition from Medieval Western society with attention to the rise of national states and the growth of individualism. Reformation is highlighted. Prerequisite: one history course or permission of instructor.
HISTORY	HST	351	RISE OF MOD ENGLAND	3	A survey of the social, political, economic, and constitutional themes that have shaped modern England since 1688. Prerequisite: one history course or permission of instructor.
HISTORY	HST	359	RUSSIA:BEGIN TO 1917	3	Russian historiography, nature, and development of the Russian Empire from the time of Peter I to the Revolution of 1917. Compares development of Russia with states and examines the roots underlying the modern Soviet state. Prerequisite: one history course or permission of instructor.
HISTORY	HST	364	EUR 20TH C:1914-1939	3	Political, economic, and cultural developments in Europe in the twentieth century; attention is given to the factors involved in the two World Wars and their global impact and significance. First semester, 1914-1939; second semester, World War II and its aftermath. Prerequisite: one history course or permission of instructor.
HISTORY	HST	365	EUR 20TH C:WW 2&AFTR	3	Political, economic, and cultural developments in Europe in the twentieth century; attention is given to the factors involved in the two World Wars and their global impact and significance. First semester, 1914-1939; second semester, World War II and its aftermath. Prerequisite: one history course or permission of instructor.
HISTORY	HST	375	COLONIAL LATIN AMER	3	Colonial era focusing on pre-Columbian civilizations, the conquerors, the creation of Spanish and Portuguese institutions for mastery of a multiracial society, the reforms of the 18th century, and the independence struggles. Prerequisite: one history course or permission of instructor.
HISTORY	HST	355	CHANGE TOPIC	0	change topic
HISTORY	HST	376	MODERN LATIN AMERICA	3	A modern period emphasizing the difficulty in creating a national self-identity, the impact of liberal and conservative philosophies on the 19th century, and the viability of revolutionary vs. non-revolutionary approaches to the problems of 20th-century Latin America. Prerequisite: one history course or permission of instructor.
HISTORY	HST	385	HISTORY OF MID EAST	3	The major political, economic, and cultural features of the Middle East with particular emphasis on modern colonialism in the area, Zionism, and the Arab States' contemporary relations with other nations. Prerequisite: one history course or permission of instructor.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HISTORY	HST	386	HIST SOUTHEAST ASIA	3	Peoples and states of Southeast Asia, Burma, Thailand, Cambodia, Laos, Viet Nam, Malaysia, Indonesia, and the Philippines, and includes the age of imperialism, colonialism, nationalism, and independence. Prerequisite: one history course or permission of instructor.
HISTORY	HST	387	HISTORY OF EAST ASIA	3	Traditional cultures and institutions of China and Japan and their roles in Korea and Southeast Asia; the role of Western powers in China's development; post-war changes; United States foreign policy in relation to the Far East; and the emergence of Communist China and Modern Japan are discussed. Prerequisite: one history course or permission of instructor.
HISTORY	HST	388	HISTORY OF AFRICA	3	After an introduction to the history of Africa prior to European colonization and a brief examination of colonialism on the continent, the course will focus on sub-Sahara Africa for the period from post World War II until the present, examining colonialism, nationalism, independence and continuing crises and problems of the nations of the continent. South Africa also will be emphasized. Prerequisite: one history course or permission of instructor.
HISTORY	HST	401	HST OF PENNSYLVANIA	3	The founding and development of Pennsylvania, emphasizing the social, political, and economic characteristics of the Commonwealth; the diversity of its people; local and family history is an important aspect. Prerequisite: one history course or permission of instructor.
HISTORY	HST	406	WESTWRD MOVEMNT AMER	3	Settlement of the geographic areas and the influence of westward expansions on the political, social and economic development of the American people. Includes the trans-Mississippi West and role of the Plains Indian in American history. Prerequisite: one history course or permission of instructor.
HISTORY	HST	430	THE AMERICAN INDIAN	3	Covers the origins, culture, and history of the American Indian. The development of Indian policy by colonial rulers and the United States is studied and compared. Problems of assimilation and cultural conflict resulting from removal as well as modern Indian problems. Prerequisite: one history course or permission of instructor.
HISTORY	HST	444	MUSEUMS/PRESRVAT&SOC	3	Provides a broad background regarding museum work, historical societies and their function, and historical preservation. Prepares students for internships and potential careers in the field of museumology and preservation. Prerequisite: one history course or permission of instructor.
HISTORY	HST	450	INTERNSHIP	3	Provides pre-professional skills. Museum and archival work are examples of areas in which students can bring together academic training and practical experience. Prerequisite: Permission of department chairperson, sponsoring instructor, and an agency.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
HISTORY	HST	451	FRANCE:REVOLUTN/PRES	3	Introduction to the social, political, economic, and constitutional themes that have shaped modern France since 1789. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	458	THE SOVIET UNION	3	Study of the Bolshevik Revolution and the founding of the Soviet Union with emphasis on the internal and external factors involved in world communism and Soviet power politics. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	470	HISTORY OF MEXICO	3	Explores pre-Columbian civilizations to the present. Studies the interaction of various racial groups, the formation of a distinct Mexican national identity, and Soviet power politics. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	496	SEMINAR/SELECT TOPCS	3	In-depth knowledge of historical methodology and research. Significant historical problems are selected for oral discussion. Prerequisite: one history course or permission of instructor. >
HISTORY	HST	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
HONORS	ID	201	ENGLAND STUDY TOUR	3	Opportunity to travel in Great Britain and live with families. Proposed programs and home stays to promote understanding, tolerance, and respect arranged through International Contact, London. Interdisciplinary seminar course offering credits in humanities, social science, or home economics electives. >
ENGLISH	JN	100	JOURNALISM	3	Fundamentals of reporting, editing, and writing feature articles. Emphasis on news evaluation, style, and structures of news stories. >
ENGLISH	JN	200	CRISIS REPORTING	3	Critical examination of the way major current issues are handled by the various media. Practice in writing, investigating, and interviewing. Prerequisite: Jn 100. >
ENGLISH	JN	210	MEDIA DESIGN	3	Studies the principles of newspapers, magazine, book, and television design. Practice in designing pages for the print media and in writing copy for programs for the electronic media. Prerequisite: Jn 100. >
ENGLISH	JN	249	CRIM JUSTICE & PRESS	3	Instruction in reporting police news. Emphasis will be given to the examination and evaluation of the contrasting viewpoints of reports, law enforcement officials, and the accused in the development and content of news stories. Prerequisite: CJA 100 and PSc 101. >
ENGLISH	JN	310	INTERP JOURNALISM	3	Examines the content, style, and techniques of contemporary interpretative news reporting propaganda, ethics, and editorial columns. Practice in writing interpretative articles. Prerequisite: Jn 100. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
ENGLISH	JN	320	CREATIVE JOURNALISM	3	Introduces the theory and practice of the New Journalism. Students will explore the culture and resources of the region, gathering materials for publishable articles. Prerequisite: Jn 100. >
ENGLISH	JN	330	PRESS PERFORMANCE	3	Evaluates the role of the contemporary American press in a modern democracy. Such problems as violence, sensationalism, and political bias will be investigated. Prerequisite: Jn 100. >
ENGLISH	JN	495	INTERNSHIP	0	An "internship" or work with local newspaper. Practice working on a publication, with attention given to the student's journalistic interest (news reporting, photography, editing) and the major aspects of production. Prerequisite: Jn 100. >
MATH	MA	090	GENERAL MATHEMATICS	3	Introduction to standard topics in arithmetic and basic algebra, including whole numbers, signed numbers, fractions, radicals, decimals, percents, solving equations, graphing, sets, exponents, inequalities, formulas, functions, and word problems. Problem solving will be stressed. DOES NOT COUNT TOWARD TOTAL CREDITS NEEDED FOR GRADUATION. >
MATH	MA	102	MATH AND CULTURE	3	Readings and discussions about mathematics and mathematicians. Designed to introduce the student to the role of mathematics in culture. This is not a course in practical mathematics; it is not designed to improve mathematical skills. It attempts to give a better understanding of what mathematics is and if it is important. In doing this students will frequently be involved in discussions of the closely related fields of history, science, and philosophy. >
MATH	MA	100	SURVEY OF MATH IDEAS	3	A liberal arts course designed to acquaint the student with the nature and scope of modern mathematics. Emphasis is on concepts and understanding rather than the acquisition of technique. Topics included are suitable for the non-science liberal arts student. No extensive background in algebra is required. >
MATH	MA	105	INTRO STATISTICS	3	A survey of basic statistical methods for analyzing data. Topics include descriptive statistics, probability, sampling, point and interval estimation, hypothesis tests, linear regression, correlation, and non-parametric tests. >
MATH	MA	107	INTRO TO COMPTR PROG	3	Fundamentals of programming applied to the university computer. Use of computer language to solve practical problems pertinent to science, business, and other disciplines. Laboratory includes use of the terminals and the university computer. >
MATH	MA	109	FINITE MATHEMATICS	3	An initial treatment of those topics in basic mathematics that are of special importance in business and the social sciences. Topics included are logic, sets, and counting techniques, probability, mathematical models, linear equations and inequalities, introduction of linear programming, and matrices, also Markov chains and game theory. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MATH	MA	111	FUND CONCPPTS OF CALC	3	A one-semester course in the fundamental concepts of calculus for non-physical science majors utilizing the basic techniques of differential and integral calculus. Prerequisite: Ma 110 or equivalent.
MATH	MA	110	COLLEGE ALGEBRA	3	Basic topics in algebra: exponents, polynomials, factoring, algebraic fractions, equations, functions, inequalities, and linear equations.
MATH	MA	120	MATH OF FINANCE	3	An introduction to topics in mathematics that relate directly to the business world: interest, discount, compound interest, annuities, amortization, sinking funds, bonds, depreciation, capitalization, perpetuities. Prerequisite: one year of high school algebra.
MATH	MA	130	ALGEBRA AND TRIG	3	Application of algebraic equations and inequalities, functions and graphs, polynomial functions, trigonometric functions and formulas, exponential and logarithmic functions, and complex numbers.
MATH	MA	140	ANLY GEOM & CALC I	3	The rate of change of a function, limits, derivatives of algebraic functions, applications and integration. Prerequisite: Ma 130 or equivalent.
MATH	MA	141	ANLY GEOM & CALC II	3	Application of the definite integral, transcendental functions, hyperbolic functions, methods of integration, and plane analytic geometry. Prerequisite: Ma 140.
MATH	MA	160	PROGRAM FOR MATH SCI	3	Basic concepts of applications and approximations of the ideas of limit, continuity, and differentiability. Also, the standard concepts in applied mathematics such as error analysis, polynomial interpolation, and solution of linear and nonlinear equations. The computer will be used as an aid to investigating these areas. Prerequisite: Ma 111 or 140 or concurrent enrollment.
MATH	MA	203	TOPICS IN ALG & GEOM	3	A study of the basic ideas and structure in modern arithmetic, algebra, and geometry.
MATH	MA	240	ANLY GEOM & CALC III	3	Plane analytic geometry, polar coordinates, polar equations, plane areas in polar coordinates, parametric equations and vectors, quadric surfaces, vector functions and their derivatives, and complex numbers and functions. Prerequisite: Ma 141.
MATH	MA	241	ANLY GEOM & CALC IV	3	Partial differentiation with applications, multiple integrals with applications, cylindrical and spherical coordinates, infinite series, power series, indeterminate forms. Prerequisite: Ma 240.

DEPARTMENT	PREFIX	COURSE NUMBER TITLE	CR	COURSE DESCRIPTION
MATH	MA	250 APPD PROB AND STATS	3	An introduction to applications of descriptive and inferential statistics and probability. Frequency distributions, measures of location and variation, probability, expected value, and decision making; probability distributions, sampling and sampling distributions; inferences concerning means, standard deviations, and proportions; analysis of variance, non-parametric methods, regression, correlation, planning surveys and experiments. Prerequisite: Ma 140. >
MATH	MA	260 DISCRETE STRUCTURES	3	Foundations of mathematics, emphasizing fundamental concepts in abstract mathematics and deductive reasoning. Topics will include logic, Boolean algebra, sets, functions, relations, cardinality, number systems, abstract systems, and algorithms. Prerequisite: Ma 140. >
MATH	MA	280 LINEAR ALG&MATRX THY	3	Topics: geometry of vectors, matrix algebra and operations, solutions of general systems of linear equations, inversion of matrices, determinants, vectors and vector spaces, subspaces, linear independence, bases and dimension, linear transformations, characteristics roots and vectors, and applications. Prerequisite: Ma 141. >
MATH	MA	304 HIST & PHIL OF MATH	3	A study of the chronological development of facets of mathematics that have contemporary importance. The historical and philosophical background of each facet is integrated with experience in mathematical study and application. Emphasis is placed on great contributors of mathematics, their contributions, and their methods of reasoning. Prerequisite: Ma 260. >
MATH	MA	308 OPERATIONS RESEARCH	3	Examines the development and use of the techniques of research. Topics include linear programming, queuing theory, probabilistic inventory models, and simulation. Prerequisite: Ma 160 and 280 or permission of instructor. >
MATH	MA	310 NUMERICAL ANALYSIS	3	A study of numerical methods for the solution of algebraic, transcendental, and differential equations, numerical integration and differentiation, and error analysis. Prerequisite: Ma 107 or 160, and 240. >
MATH	MA	311 DIFFER EQUATIONS I	3	Ordinary differential equations, exact equations, integrating factors, differential equations of the first order and first degree, differential equations with constant coefficients and applications. Laplace transforms and existence theorems. Prerequisite: Ma 141. >
MATH	MA	312 DIFFER EQUATIONS II	3	Series solutions to ordinary differential equations, solutions of partial differential equations, and boundary value problems. Laplace transforms and Fourier series. Prerequisite: Ma 311. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MATH	MA	315	APPD REGRESSION ONLY	3	Simple and multiple regression will be used to analyze data. Residual analysis, indicator variables, and step-wise and polynomial regression. Computer software will be used to analyze data. Prerequisite: Ma 105 or 250.
MATH	MA	320	APPD COMBINATORICS	3	Applied discrete mathematics emphasizing combinatorics and graph theory. Topics will be chosen from counting methods, generating functions, recurrence relations, inclusion-exclusion, the Polya enumeration formula, graph theory, covering circuits, trees, and searching and network algorithms. Prerequisite: Ma 141.
MATH	MA	324	APPLIED MATHEMATICS	3	Illustrates the principles and basic styles of thought in solving physical problems by mathematical methods. Particle dynamics, heat and fluid flow, wave equations, vector, Fourier and tensor analysis. Prerequisite: Ma 240 and 280 or permission of instructor.
MATH	MA	329	MODERN GEOMETRY I	3	An introduction to the foundations of geometry with emphasis on the axiomatic development of the Euclidean system. Prerequisite: Ma 260.
MATH	MA	330	MODERN GEOMETRY II	3	The foundations of geometry with emphasis on non-Euclidean axiomatic structures. Prerequisite: Ma 329 or permission of instructor.
MATH	MA	335	NUMBER THEORY	3	An analytical study of basic concepts including divisibility, congruence, quadratic reciprocity and Diophantine equations. Varied methods are stressed. Prerequisite: Ma 141 and 260.
MATH	MA	345	REAL ANALYSIS I	3	The real number system. Emphasis on the concepts and theoretical approach to calculus: functions, sequences, series, limits, continuity, derivatives, the Riemann integrals, and sequences of functions. Prerequisite: Ma 241 and 260.
MATH	MA	346	REAL ANALYSIS II	3	A continuation of MA 345. Prerequisite : Ma 345
MATH	MA	348	COMPLEX VARIABLES	3	A first course in complex variables. Complex numbers, analytic functions, elementary functions, mappings by elementary functions, integrals, power series, residues, poles, and conformal mappings. Prerequisite: Ma 241.
MATH	MA	361	MODERN ALGEBRA I	3	Sets, rings, integral domains, fields, groups, polynomials, congruences, algebra or classes, mappings, homomorphisms and isomorphisms. Prerequisite: Ma 260 or permission of instructor.
MATH	MA	362	MODERN ALGEBRA II	3	A continuation of Ma 361 consisting of a more detailed study of groups, rings, ideals, fields, and selected topics. Prerequisite: Ma 361.
MATH	MA	371	MATH STATISTICS I	3	Distributions of discrete and continuous random variables, expected values and moments, conditional probability and independence, special discrete and continuous distributions. Prerequisite: Ma 241 or concurrent enrollment.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MATH	MA	372	MATH STATISTICS II	3	Interval estimation, order statistics, point estimation, tests of hypotheses. Prerequisite: Ma 371.
MATH	MA	381	TOPOLOGY	3	Introduction to point-set topology. Set theory, metric spaces, topological spaces, connectedness, and compactness. Prerequisite: Ma 141 and 260.
MATH	MA	401	CHANGE TOPIC	3	Selections from topology, algebra, real analysis, matrix theory, computer science or other junior or senior level topics. Active participation by the student is required. Prerequisite: permission of instructor.
MATH	MA	402	SEMINAR	3	Papers from the American Mathematical Monthly, comparable journals and various advanced references will be presented and discussed by the students. Continuous reading and participation will be required. Prerequisite: permission of instructor.
MATH	MA	450	INTERNSHIP	3	Provides pre-professional skills to interested majors. Business, industry, educational or research work are examples of areas in which students can bring together academic training and practical experience.
MATH	MA	497	INDEPENDENT STUDY	0	(See description in section of Academic Policies.)
MUSIC	MAP	101	VOICE CLASS I	1	Develops proper vocal production, poise, and confidence in solo singing. Remedial work for individual problems.
MUSIC	MAP	102	VOICE CLASS II	1	Continuation of Voice Class I. Prerequisite: MAP 101.
MUSIC	MAP	103	ADVANCED VOICE CLASS	1	Instruction in voice will be given on a level beyond beginning voice class (MAP 101 and 102). Goals of the course: to improve technique, quality, and artistry of individual voices; and to focus class attention on common vocal problems and their remediation.
MUSIC	MAP	111	INTRO TO THE PIANO	1	Designed to give non-music majors with no previous keyboard experience an opportunity to learn the very basics of piano playing.
MUSIC	MAP	112	BEGIN PIANO CLASS	1	Remedial piano study for those unable to meet entrance requirements.
MUSIC	MAP	113	CLASS PIANO I	1	For the student with limited piano skill. Prerequisite: ability to perform with reasonable fluency at least five pieces from the last pages of any standard first grade instruction book (such as Thompson, Schaum, Fletcher, Kasschau, et al.), and to play at sight pieces from the first half of a similar book.
MUSIC	MAP	114	CLASS PIANO II	1	Designed for the music major who has successfully completed MAP 113, and who might reach the level of skill required by the first proficiency examination. Prerequisite: MAP 113 or equivalent.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MUSIC	MAP	115	ADV PIANO CLASS	1	Designed for the music education vocal concentration major. Development of advancing piano skills to reach the level of the Third Proficiency. Prerequisite: Passing of the First Proficiency Examination or audition. >
MUSIC	MAP	131	WOODWIND CLASS I	1	Studies the fundamental principles and techniques necessary for playing and teaching the flute and clarinet; study of the literature appropriate for beginning class instruction. >
MUSIC	MAP	132	WOODWIND CLASS II	1	Studies the fundamental principles and techniques necessary for playing and teaching the saxophone, oboe, and bassoon; study of the literature appropriate for beginning class instruction. >
MUSIC	MAP	133	ADV WOODWIND CLASS	1	Instruction in woodwind instruments on a level beyond that of the beginning courses. Introduces more scales, more advanced work with embouchure, tone, tonguing. Suitable literature for the various instruments. >
MUSIC	MAP	141	BRASS CLASS I	1	Studies the fundamental principles and techniques necessary for playing and teaching the trumpet and horn; study of the literature appropriate for beginning class instruction. >
MUSIC	MAP	142	BRASS CLASS II	1	Studies the fundamental principles and techniques necessary for playing and teaching the trombone, euphonium, and tuba; study of the literature appropriate for beginning class instruction. >
MUSIC	MAP	143	ADV BRASS CLASS	1	Instruction in brass instruments on a level beyond that of the beginning courses. Scales in various articulations and ranges, more advanced technical work and styles, suitable literature for the various instruments. >
MUSIC	MAP	151	STRING CLASS I	1	Acquaints the non-string player with the basic elements of string instrument playing. Instruction in various instruments, fundamentals of correct playing, and familiarity with problems of class instruction in typical elementary school string classes. >
MUSIC	MAP	152	STRING CLASS II	1	Continuation of MAP 151. Students specialize on violin, viola, cello, or bass. Presents keys up to four sharps and two flats with corresponding fingering problems. Introduces bass players to various positions, and cello players to extended second finger pattern. Introduces various staccato bowing patterns. Violin and viola students practice simple third position exercises. Principles of vibrato presented. >
MUSIC	MAP	153	ADV STRING CLASS	1	Instruction in stringed instruments on a level beyond that of the beginning courses. Introduces scales in various positions, more advanced work with the various staccato and spiccato bowings. Suitable literature for the various instruments. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MUSIC	MAP	157	GUITAR CLASS I	1	Beginning study of the guitar. Functional use of the guitar in the music classroom. Accompanying singing. >
MUSIC	MAP	158	GUITAR CLASS II	1	Continuation of MAP 157. More advanced work in techniques and corresponding literature. >
MUSIC	MAP	161	PERCUSSION CLASS	1	Studies the characteristics for the various percussion instruments; performance techniques: development of performing ability necessary to teach the percussion instruments at the elementary and secondary level of instruction. >
MUSIC	MAP	163	ADV PERCUSSION CLASS	1	Instruction in percussion instruments on a level beyond that of the beginning course. Introduces more advanced work with the various percussion instruments. Suitable literature for various instruments. >
MUSIC	MAP	200	VOICE SECONDARY	1	Voice secondary - 1/2 hour lesson >
MUSIC	MAP	210	PIANO SECONDARY	1	Piano secondary - 1/2 hour lesson >
MUSIC	MAP	220	ORGAN SECONDARY	1	Organ secondary - 1/2 hour lesson >
MUSIC	MAP	225	HARPSICHORD SEC	1	Harpsichord secondary - 1/2 hour lesson >
MUSIC	MAP	230	FLUTE SECONDARY	1	Flute secondary - 1/2 hour lesson >
MUSIC	MAP	231	OBOE SECONDARY	1	Oboe secondary - 1/2 hour lesson >
MUSIC	MAP	232	CLARINET SECONDARY	1	Clarinet secondary - 1/2 hour lesson >
MUSIC	MAP	233	BASSOON SECONDARY	1	A study of the principles of oboe and bassoon reed making with a hands-on approach for double reed students. >
MUSIC	MAP	234	SAXOPHONE SECONDARY	1	Saxophone secondary - 1/2 hour lesson >
MUSIC	MAP	240	TRUMPET SECONDARY	1	Trumpet secondary - 1/2 hour lesson >
MUSIC	MAP	241	HORN SECONDARY	1	Horn secondary - 1/2 hour lesson >
MUSIC	MAP	242	TROMBONE SECONDARY	1	Trombone secondary - 1/2 hour lesson >
MUSIC	MAP	243	EUPHONIUM SECONDARY	1	Euphonium secondary - 1/2 hour lesson >
MUSIC	MAP	244	TUBA SECONDARY	1	Tuba secondary - 1/2 hour lesson >
MUSIC	MAP	250	VIOLIN SECONDARY	1	Violin secondary - 1/2 hour lesson >
MUSIC	MAP	251	VIOLA SECONDARY	1	Viola secondary - 1/2 hour lesson >
MUSIC	MAP	252	CELLO SECONDARY	1	Cello secondary - 1/2 hour lesson >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MAP	253	BASS SECONDARY	1	Bass secondary - 1/2 hour lesson >
MUSIC	MAP	257	GUITAR SECONDARY	1	Guitar secondary - 1/2 hour lesson >
MUSIC	MAP	260	PERCUSSION SECONDARY	1	Percussion secondary - 1/2 hour lesson >
MUSIC	MAP	300	VOICE	0	Voice - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	310	PIANO	0	Piano - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	320	ORGAN	0	Organ - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	325	HARPSICHORD	0	Harpsichord - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	330	FLUTE	0	Flute - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	331	OBOE	0	Oboe - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	332	CLARINET	0	Clarinet - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	333	BASSOON	0	Bassoon - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	334	SAXOPHONE	0	Saxophone - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	340	TRUMPET	0	Trumpet - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	341	HORN	0	Horn - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	342	TROMBONE	0	Trombone - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	343	EUPHONIUM	0	Euphonium - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	344	TUBA	0	Tuba - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	350	VIOLIN	0	Violin - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	351	VIOLA	0	Viola - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	352	CELLO	0	Cello - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	353	BASS	0	Bass - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	357	GUITAR	0	Guitar - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	360	PERCUSSION	0	Percussion - 1/2 hour lesson. can be taken for 1 or 2 credits. >
MUSIC	MAP	400	VOICE	0	voice. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	410	PIANO	0	piano. 1 hour lesson. can be taken for one, two or four credits. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MAP	420	ORGAN	0	organ. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	425	HARPSICHORD	0	harpsichord. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	431	OBOE	0	oboe. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	432	CLARINET	0	clarinet. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	433	BASSOON	0	bassoon. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	434	SAXOPHONE	0	saxophone. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	440	TRUMPET	0	trumpet. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	441	HORN	0	horn. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	442	TROMBONE	0	trombone. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	443	EUPHONIUM	0	euphonium. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	444	TUBA	0	tuba. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	450	VIOLIN	0	violin. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	451	VIOLA	0	viola. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	452	CELLO	0	cello. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	453	BASS	0	bass - 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	457	GUITAR	0	guitar. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	460	PERCUSSION	0	percussion. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	430	FLUTE	0	flute. 1 hour lesson. can be taken for one, two or four credits. >
MUSIC	MAP	254	HARP SECONDARY	1	Harp secondary - 1/2 hour lesson >
MUSIC	MAP	231L	REED MAKING LAB	0	A study of the principles of oboe and bassoon reed making with a hands-on approach for double reed students. >
MUSIC	MAP	233L	REED MAKING LAB	0	A study of the principles of oboe and bassoon reed making with a hands-on approach for double reed students. >
MUSIC	MAP	331L	REED MAKING LAB	0	A study of the principles of oboe and bassoon reed making with a hands-on approach for double reed students. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MAP	333L	REED MAKING LAB	0	A study of the principles of oboe and bassoon reed making with a hands-on approach for double reed students.
MUSIC	MAP	431L	REED MAKING LAB	0	oboe lab
MUSIC	MAP	433L	REED MAKING LAB	0	bassoon lab
MUSIC	MEN	000	RECITAL ATTENDANCE	0	recital attendance. to be taken for no credit.
MUSIC	MEN	300	CONCERT CHOIR	0	A highly select choir of forty eight voices. Presents a concert each semester and joins with the other choruses for a biennial choral festival. The choir is a touring ensemble. May be taken for 0 or 1 credit.
MUSIC	MEN	301	FESTIVAL CHORUS	0	A mixed chorus providing opportunity to experience great choral literature. Presents a concert each semester and joins other choruses for the biennial choral festival. May be taken for 0 or 1 credit.
MUSIC	MEN	302	OPERA WORKSHOP	0	Study and performance of operatic and musical comedy scenes chosen according to the abilities of the students in the workshop. Full-scale musical comedy productions done in conjunction with the department of speech, communications and theatre. Under supervision, students perform in, musically direct, coach, accompany, conduct, and stage direct various scenes. May be taken for 0 or 1 credit.
MUSIC	MEN	303	MANSFIELDIANS	0	A pop singing ensemble. Audition required. Specializes in singing folk, popular, and show music. Available for performance in public schools, service agencies, and alumni functions. May be taken for 0 or 1 credit.
MUSIC	MEN	304	CHAMBER SINGERS	0	A vocal chamber ensemble. Specializes in repertoire of the vocal chamber medium. Concerts are given at the University and off-campus by request. Audition required. May be taken for 0 or 1 credit.
MUSIC	MEN	305	VOCAL ENSEMBLE	0	Studies and performs representative works for various vocal combinations. May be taken for 0 or 1 credit.
MUSIC	MEN	310	PIANO ENSEMBLE	0	Study and performance of two-piano and four-hand literature, chamber music, sonatas, and trios. Accompaniment of standard instrumental and vocal literature. Can be taken for 0 or 1 credit.
MUSIC	MEN	330	CONCERT WIND ENSEMBL	0	A highly select concert band of forty eight woodwind, brass, and percussion players selected by audition at the beginning of each semester. In addition to presenting concerts on campus, the wind ensemble is a touring ensemble. May be taken for 0 or 1 credit.
MUSIC	MEN	332	SYMPHONIC BAND	0	Studies a wide variety of band literature and presents concerts on campus. May be taken for 0 or 1 credit.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MEN	331	MOUNTIE MARCHNG BAND	0	Performs at all home football games and hosts the Mansfield University band day. Performs at out-of-town football games, as well as periodic appearances at professional games, special functions, and international events. May be taken for 0 or 1 credit. >
MUSIC	MEN	333	WOODWIND ENSEMBLE	0	Study and performance of representative works for various woodwind ensembles. One woodwind quintet and one sax quintet take an annual tour. May be taken for 0 or 1 credit. >
MUSIC	MEN	334	BRASS ENSEMBLE	0	Study and performance of representative works for various combinations of brass instruments. May be taken for 0 or 1 credit. >
MUSIC	MEN	335	CONCERT JAZZ BAND	0	Performs several times each year on campus as well as touring and performing concerts off-campus. Membership by audition. May be taken for 0 or 1 credit. >
MUSIC	MEN	336	SML JAZZ&COMERCL ENS	0	Provides opportunity for students to gain supervised experience in performing jazz and other current professional music idioms in small groups. May be taken for 0 or 1 credit. >
MUSIC	MEN	350	ORCHESTRA	0	College-Community Symphony. Provides an opportunity to participate in the performance of standard symphonic literature. The orchestra presents a concert each semester, accompanies outstanding student soloists, participates in the biennial choral festival, and is a touring ensemble. May be taken for 0 or 1 credit. >
MUSIC	MEN	351	STRING ENSEMBLE	0	Study and performance of standard literature for string ensembles. May be taken for 0 or 1 credit. >
MUSIC	MEN	357	GUITAR ENSEMBLE	0	Introduction of the technique and repertoire of guitar ensemble music, and ensemble performance skills. May be taken for 0 or 1 credit. >
MUSIC	MEN	360	PERCUSSION ENSEMBLE	0	Study and performance of representative works for all combinations of percussion instruments. May be taken for 0 or 1 credit. >
MUSIC	MEN	100	CONCERT CHOIR	0	Concert Choir. A highly select choir of 48 voices. Presents a concert each semester and joins with the other choruses for a biennial choral festival. The choir is a touring ensemble. >
MUSIC	MEN	101	FESTIVAL CHORUS	0	Festival Chorus. A mixed chorus providing opportunity to experience great chor-al literature. Presents a concert each semester and joins other choruses for the biennial choral festival. >
MUSIC	MEN	102	OPERA WORKSHOP	0	Study and performance of operatic and musical comedy scenes chosen according to the abilities of the students in the workshop. Full-scale musical comedy productions done in conjunction with the department of speech, communications and theatre. Under supervision, students perform in, musically direct, coach, accompany, conduct, and stage direct various scenes. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MEN	103	MANSFIELDIANS	0	A pop singing ensemble. Audition required. Specializes in singing folk, popular, and show music. Available for performance in public schools, service agencies, and alumni functions. >
MUSIC	MEN	104	CHAMBER SINGERS	0	A vocal chamber ensemble. Audition required. Specializes in repertoire of the vocal chamber medium. Concerts are given at the University and off-campus by request. >
MUSIC	MEN	105	VOCAL ENSEMBLE	0	Studies and performs representative works for various vocal combinations. >
MUSIC	MEN	110	PIANO ENSEMBLE	0	Study and performance of two-piano and four-hand literature, chamber music, sonatas and trios. Accompaniment of standard instrumental and vocal literature. >
MUSIC	MEN	130	CONCERT WIND ENSEMBL	0	Concert Wind Ensemble. A highly select concert band of 48 woodwind brass and percussion players selected by audition at the beginning of each semester. In addition to presenting concerts on campus, the Wind Ensemble is a touring ensemble. >
MUSIC	MEN	131	MOUNTIE MARCHING BAND	0	mountie marching band. fall semester only. performs at all home football games, and hosts the mansfield university band day. performs at out-of-town football games, as well as periodic appearances at professional games, special functions, and international events. >
MUSIC	MEN	132	SYMPHONIC BAND	0	symphonic band. spring semester only. approximately 60 members. studies a wide variety of band literature and presents concerts on campus. >
MUSIC	MEN	133	WOODWIND ENSEMBLE	0	Study and performance of representative works for various woodwind ensembles. One woodwind quintet and one sax quintet take an annual tour. >>
MUSIC	MEN	134	BRASS ENSEMBLE	0	Study and performance of representative works for various combinations of brass instruments. >
MUSIC	MEN	135	CONCERT JAZZ BAND	0	Performs several times each year on campus as well as touring and performing concerts off-campus. Membership by audition. >
MUSIC	MEN	136	SML JAZZ&COMERCL ENS	0	Provides opportunity for students to gain supervised experience in performing jazz and other current professional music idioms in small groups. >
MUSIC	MEN	150	ORCHESTRA	0	College-Community Symphony. Provides an opportunity to participate in the performance of standard symphonic literature. The orchestra presents a concert each semester, accompanies outstanding student soloists, participates in the bi-ennial choral festival. The choir is a touring ensemble. >
MUSIC	MEN	151	STRING ENSEMBLE	0	Study and performance of standard literature for string ensembles. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MEN	157	GUITAR ENSEMBLE	0	Introduction of the technique and repertoire of guitar ensemble music, and ensemble performance skills. >
MUSIC	MEN	160	PERCUSSION ENSEMBLE	0	Study and performance of representative works for all combinations of percussion instruments. >
MUSIC	MEN	536	SML JAZZ&COMERCL ENS	1	Provides opportunity for students to gain supervised experience in performing jazz and other current professional music idioms in small groups. >
BUS ADM	MGT	302	LAND & PROPERTY MGT	3	A study of the different types of land and real property acquisition, use, financing, and management. It is a detailed examination of sale, rental, lease, and occupancy of land and property with emphasis on the closing of title and rights and duties of ownership and possession. Condominium and cooperative ownership will be examined from the viewpoint of family housing. The function, practice, and procedures used by real estate brokers will be covered from an office-management and profit-making perspective. Tax, insurance, and consequences of sale for residential, rental, and industrial property will be discussed in detail, as well as financing sources and procedures for residential, rental, industrial, cooperative, condominium, and subdivisions, covering existing property and discussing construction financing for each type. Prerequisite: Bus 410 or permission of instructor. >
BUS ADM	MGT	305	FUNDS INSUR&RISK MGT	3	Examines the fundamental concepts used by the insurance industry in the formulation of policies and premiums. Different types of insurance are examined, with a discussion of the factors to be considered in policy formulation. The relationship between the insurer and insured under applicable law is investigated and the methods of accounting specifically appropriate for insurance carriers are examined and the role of the actuary discussed. The effect of No Fault Insurance and Workmen's Compensation is examined, and the concept and practice of Risk Management by insurer and insured is investigated. Prerequisite: Acc 111 and Bus 410. >
BUS ADM	MGT	371	PROCURE & PURCH MGMT	3	An examination of procurement and purchasing from the point of view of the business selling goods and services to governmental agencies, as well as for the manager charged with purchasing goods and services for use by the firm. Applicable rules and regulations pertaining to governmental procurement will be examined and the different types of procurement contracts will be discussed. Industrial purchasing will be covered with emphasis on inventory, requirements, solicitation, evaluation, award, performance, and termination. Ethical considerations for the contracting officer and purchasing manager will be discussed. Prerequisite: Acc 111 and Bus 130. >
MLS	MS	110	INTRO TO MIL SCI I	1	Introduction to the solving of leadership problems. An in-depth study of the role and branches of the Army. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MLS	MS	110L	INTRO MIL SCI I LAB	0	Intro to military science I lab >
MLS	MS	120	INTRO TO MIL SCI II	1	Land navigation procedures including the use of maps, aerial photographs, and other topographic information including practical field training are provided. >
MLS	MS	120L	INTRO MIL SCI II LAB	0	Intro to military science II lab >
MLS	MS	210	APPD LDRSHP & MGT I	1	Introduces the functions and responsibilities of leaders through the platoon level of command. Platoon level tactical concepts and principles are examined. Continued development of leadership through practical exercises and field training. >
MLS	MS	210L	APP LDRSHP&MGT I LAB	0	applied leadership and management I lab >
MLS	MS	220	APPD LDRSHP & MGT II	1	Examines fundamentals of leadership and management to include practical exercises in solving leadership problems. Provides an in-depth study of the role and branches of the Army. >
MLS	MS	220L	APP LDRSH&MGT II LAB	0	applied leadership and management II lab >
MLS	MS	230	ROTC BASIC CAMP	4	Offered in lieu of the Basic Course for transfer students and other students who wish to enter the Advanced Course. This is a six week camp held each summer at Fort Knox, Kentucky. >
MLS	MS	310	ADV LDRSHP & MGT I	3	Development of the cadet into an effective leader by gaining an understanding of principles of leadership and appreciation of the operational setting within which most newly commissioned officers will work. >
MLS	MS	310L	ADV LDRSHP&MGT I LAB	0	Advanced leadership and management I lab >
MLS	MS	320	ADV LDRSHP & MGT II	3	A detailed study of small unit tactics, to include an analysis of fire support available to the junior officer. An overview of special and combined operations. Includes a practical application phase during field training and leadership laboratories. >
MLS	MS	320L	ADV LDRSH&MGT II LAB	0	Advanced leadership and management II lab >
MLS	MS	330	ROTC ADV SUMMER PROG	3	A six-week practical application and evaluation phase required of each cadet prior to commissioning. Advanced Camp, conducted at Fort Bragg, North Carolina, places cadets in leadership positions where they must put into practice the techniques learned on campus in both tactical and non-tactical situations. >
MLS	MS	410	MIL JUSTICE PARADIGM	3	A survey of military professional ethics and law and its relationship to the civil government structure. Instruction includes studies of case law, seminar discussions, and a study of the Uniform Code of Military Justice. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MLS	MS	410L	MIL JUST PARADGM LAB	0	The military justice paradigm lab >
MLS	MS	420	THRY&DYNAM MIL TEAM	3	An analysis of military leadership problems and officer responsibilities in the modern Army with additional emphasis on military correspondence and briefings. Includes practical application. >
MLS	MS	420L	THRY&DYN ML TEAM LAB	0	Theory and dynamics of the military team lab >
MUSIC	MTH	171	THERAPY ORIENTATION	3	Studies the nature of music therapy and the therapeutic process. Students will gain a better understanding of the clients served and the types of treatment available. >
MUSIC	MTH	210	CLINIC INTEGRATN I	1	Students will participate in weekly laboratory experiences on campus and in a clinical setting. Written assignments and a workshop experience are required. Prerequisite: MTH 171, SPE 101 and MAP 157. >
MUSIC	MTH	211	CLINIC INTEGRATN II	1	Students will participate in weekly lecture/discussion sessions and clinical experiences. Written assignments and a workshop experience are required. >
MUSIC	MTH	372	PSY-SOC FOUND MUSIC	3	Studies the functions of music in society and the psychological attributes of music. Students gain a better understanding of the effects and properties of music in human life. A paper and an oral report are required. >
MUSIC	MTH	410	ADV CLIN INTEGRATN I	0	Provides preparation for advanced clinical work with a wide range of client populations. Provides relevant academic preparation and opportunities to develop clinical skills and to deepen personal awareness. A workshop experience is required. Prerequisite: MTH 171, 210, 211 and 211L. >
MUSIC	MTH	411	ADV CLIN INTEGRATN II	0	Provides preparation for advanced clinical work with a wide range of client populations. Provides relevant academic preparation and opportunities to develop clinical skills and to deepen personal awareness. A workshop experience is required. Prerequisite: Mth 171, 210, 211 and 211L. >
MUSIC	MTH	471	INFLUENC MUS ON BEHA	3	A survey of research in music therapy with a focus on ways music can be employed in the therapeutic process to change problem behaviors. A paper is required. >
MUSIC	MTH	472	MUSIC IN THERAPY	3	Studies the relationships of music therapy to institutional organization and administration and to other therapeutic disciplines. A project/paper is required. >
MUSIC	MTH	475	INTERNSHIP	2	A practical application of theories of uses of music in therapeutic settings. Choices such as a hospital, state school, correctional facility, public school, special education, and private school may be available. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MTH	211L	CLINICAL ORIENT LAB	1	Clinical orientation lab. Prerequisite: MTH 171. >
MUSIC	MTH	355	CHANGE TOPIC	0	change topic >
MUSIC	MU	101	INTRO TO MUSIC	3	Studies principal vocal and instrumental forms and media. Surveys the most important compositions from the early Baroque to the present. >
MUSIC	MU	102	FUNDS OF MUSIC	3	The fundamentals of music theory (melody, rhythm, harmony, form, and timbre) are introduced in a "hands-on" practical manner. Activities include analysis of music examples, composition, guided listening, performing, and keyboard theory lab. Music fundamentals will be approached from the standpoints of the listener, the performer, and the composer. >
MUSIC	MU	141	INTRO TO MUSIC EDUC	1	An introductory course providing an overview of music education and an acquaintance with the process of teaching and learning music in the elementary and secondary schools. >
MUSIC	MU	151	EURYTHMICS I	1	Laboratory experience in rhythmic movement to develop skill and greater perception of common rhythms. The Jacques Dalcroze philosophy is followed. >
MUSIC	MU	152	EURYTH II/BAS CONDUCT	1	Develops greater sensitivity to and awareness of the nuances of dynamics and rhythm. Beginning conducting techniques are included. Prerequisites: Mu 151. >
MUSIC	MU	201	INTRO TO JAZZ	3	Studies the evolutionary history of jazz from the earliest African and European influences to the present. Emphasizes listening experiences and develops an awareness of the unique role of jazz in American culture. >
MUSIC	MU	211	BASIC MUSIC I	3	Development of vocabulary; study of modes, scales, harmonic rhythmic, and composition techniques. Supportive examples selected from all periods of music. Sight singing and dictation. >
MUSIC	MU	212	BASIC MUSIC II	3	Continuation of MU 211. Analysis and creative projects involving Baroque practices of figured bass, functional harmony, modulation, and altered chords. >
MUSIC	MU	221	CLASSIC AND ROM MUS	2	Surveys Western European musical literature and musical styles of the Classic and Romantic Eras. May be taken for 2 or 3 credits only. >
MUSIC	MU	222	POST ROM&20TH CNTRY	2	Surveys Western European and American musical literature and musical styles beginning with the Post-Romantic Era through main currents of 20th-century composition. Prerequisite: Mu 221 or permission of instructor. May be taken for 2 or 3 credits only. >
MUSIC	MU	261	FUND JAZZ IMPROV I	2	Studies the materials, styles, and techniques of creative and spontaneous jazz performance. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	262	FUND JAZZ IMPROV II	2	Continuation of Mu 261. >
MUSIC	MU	211L	BASIC MUSIC I LAB	0	basic music I lab >
MUSIC	MU	212L	BASIC MUSIC II LAB	0	basic music II lab >
MUSIC	MU	263	JAZZ STYLES AND ANALY	3	In-depth examination and analysis of the stylistic features of the important performers and periods of jazz. Ability to read music required. >
MUSIC	MU	301	WORLD MUSIC	3	Music of various continents are explored with particular emphasis on each tradition's cultural function. Provides the fundamental research and comparative skills needed to understand and listen to selected non-western music. Includes discussions of how Western art and popular music incorporate these styles. >
MUSIC	MU	302	INTRO ORIENTAL MUSIC	3	intro to oriental music >
MUSIC	MU	311	BASIC MUSIC III	3	Studies more elaborate harmonic and formal structures. Examines macro-micro elements in relation to performance practices. Creative and analytic projects based on fugal style, rondo and sonata form, and the art song. >
MUSIC	MU	311L	BASIC MUSIC III LAB	0	basic music III lab >
MUSIC	MU	312	BASIC MUSIC IV	3	Examines contemporary techniques. Examples selected from Debussy to post-1950. Creative projects involving the whole tones and twelve-tone scales, and aleatoric and electronic compositions. Sight singing and dictation to include atonal pitch sets. >
MUSIC	MU	312L	BASIC MUSIC IV LAB	0	basic music IV lab >
MUSIC	MU	315	ORCHESTRATION	3	Designed to provide the basic skills of notation, parts extraction, transposing and arranging, in addition to information on instrumental ranges, qualities, and usages. Strings, woodwinds, and brass are treated as distinct families. Provides a fluent understanding of skills and concepts and, as a by-product, the student will become more aware of score reading and audio awareness. Good manuscript habits will make it possible for musicians to read new music and students will be able to use these skills in graduate school. Prerequisite: Mu 214 or permission of instructor. >
MUSIC	MU	317	KEYBOARD SKILLS I	1	Intensive work in accompanying melodies in major and minor keys, with beginning work in modal harmony. Development of varied accompanimental styles, improvisation, command of functional harmony, "playing by ear", transposition, sight reading melodies from elementary music, and harmonizing these melodies at sight. Prerequisite: Mu 212. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	318	KEYBOARD SKILLS II	1	Continuation of Mu 317. More complex accompanimental styles, secondary dominant chords, improvisation, transposition, "playing by ear", modulatory techniques, sight reading from junior high music series, sight reading melodies and supplying appropriate accompaniment. Prerequisite: Mu 317 or equivalent.
MUSIC	MU	321	MEDIEVAL&RENAISS MUS	2	Surveys Western European musical literature and musical styles beginning with the early Christian era through the Renaissance. Prerequisite: Mu 221 or permission of instructor. May be taken for 2 or 3 credits only.
MUSIC	MU	322	BAROQUE & PRE-CLASS	2	Surveys Western European musical literature and musical styles of the Baroque and Pre-classical Eras. Prerequisite: Mu 221 or permission of instructor. May be taken for 2 or 3 credits only.
MUSIC	MU	323	PIANO LITERATURE I	2	Detailed study of the literature of the piano from the keyboard works of the late Renaissance through the piano works of the 18th century.
MUSIC	MU	324	PIANO LITERATURE II	2	Detailed study of the literature of the piano from the 19th century to the present day.
MUSIC	MU	340	TEACHING MUSIC	3	A course designed to enable elementary education majors to integrate the teaching of music into the mainstream of the elementary school curriculum. Fundamentals of music, musical characteristics of children, concept development, and musical activities appropriate for the age group will be stressed. Includes observation/participation in the local elementary school.
MUSIC	MU	340L	TEACHING MUSIC LAB	0	teaching music lab
MUSIC	MU	341L	MUSIC ELEM SCH LAB	0	music in the elementary school lab
MUSIC	MU	341	MUS IN ELEM SCHOOL	2	Studies the developmental and musical characteristics of children ages 5-11. Emphasizes teaching the elements of music through musical activities appropriate for this age group. Includes a survey of current materials as well as observation/participation in the local elementary school. Particular attention is given to curricular development for vocal and general music classes. Prerequisite: Mu 212 and five hours of pre-professional experience.
MUSIC	MU	342	MUS IN SEC SCHOOL	2	Studies the developmental and musical characteristics of students ages 12-18. Emphasizes teaching the elements of music through musical experiences appropriate for this age group. Includes a survey of current materials as well as observation/participation in the local secondary school. Particular attention is given to classroom management, students with exceptionalities of all ages, curriculum development in general music classes, elective classes, and an overall philosophy of music education. Prerequisite: Mu 341 and five hours of pre-professional experience.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	342L	MUSIC SEC SCH LAB	0	music in the secondary school lab >
MUSIC	MU	343L	INST MUS PUB SCH LAB	0	instrumental music in public schools lab >
MUSIC	MU	343	INSTR MUS IN PUB SCH	2	Study of a suitable instrumental program for a public school system. Particular attention to class teaching techniques of the various instruments. Problems of organization and administration of such a program; survey and examination of the available instructional material. Prerequisite: Mu 212 and five hours pre-professional experience. >
MUSIC	MU	344	VOC-CHOR MUS PUB SCH	2	Study of a suitable choral program for a public school system. Particular attention is given to the teaching of voice through the developmental stages of middle and high school students. Experience in working with the age group is an important part of the course. >
MUSIC	MU	350	CHORAL CONDUCTING	2	Prepares the future music educator to organize, teach, and conduct choral organizations of varying levels of achievement, particularly junior and senior high school age groups. Experience in conducting the class as a chorus is integral to the course. Prerequisite: Mu 212. >
MUSIC	MU	351	INSTRUMENTAL CONDUCT	2	Prepares for conducting instrumental groups. Emphasis on communicative and control techniques of conducting and rehearsal and performance techniques. Experience through conducting a laboratory band and orchestra. Videotaping is utilized extensively with each individual. Prerequisite: Mu 212. >
MUSIC	MU	361	JAZZ ARRANGING I	2	Studies techniques in arranging for modern jazz ensembles of all sizes. >
MUSIC	MU	362	JAZZ ARRANGING II	2	A more advanced course in the styles and techniques of arranging for modern jazz ensembles of all sizes. >
MUSIC	MU	363	JAZZ ENSEMB MTL&TECH	2	Acquaints prospective directors of secondary school performing jazz ensembles with materials and techniques appropriate to the idiom. Highly useful to students interested in amateur or professional jazz ensemble performance outside of educational institutions. >
MUSIC	MU	400	STUDENT TEACHING	**	(By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the departmental supervisor. Prerequisite: 2.5 QPA. >
MUSIC	MU	410	FORMS AND ANALYSIS	3	Various methods of musical analysis are studied and applied to compositions representative of various periods of music history. >
MUSIC	MU	411	COUNTERPOINT	3	Studies the contrapuntal style of the late 17th and early 18th centuries. Prerequisite: Mu 312. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	412	ADVANCED HARMONY	3	Harmonic techniques of the late nineteenth and early twentieth centuries; interrelationships of harmonic vocabulary and musical form. Prerequisite: Mu 312
MUSIC	MU	417	COMPOSITION	3	Contemporary techniques of musical composition; emphasis on creative work. Prerequisite: Mu 312 or permission of instructor.
MUSIC	MU	418	ADV COMPOSITION	3	Continuation of composition I. For students interested in more intensive work than can be provided in composition I.
MUSIC	MU	420	SONG LITERATURE	3	Studies development of monophonic song from the days of the troubadours and trouvères to the present time. Emphasizes especially the history of the German lied, the French chanson or melody, and solo song in the British Isles and the United States. Also includes the major composers of song in the Slavic countries, Spain, South America, and Scandinavia.
MUSIC	MU	427	CONTEMPORARY MUSIC	3	Surveys the styles, forms, and musical techniques of contemporary music.
MUSIC	MU	428	AMERICAN MUSIC	3	Historical background and development of music in the United States from colonial times to the present. Studies the principal composers and their music. Reading, research, and listening emphasized.
MUSIC	MU	429	ADV MUSIC LITERATURE	3	Intensive study of selected choral, solo, chamber, and orchestral masterpieces: emphasis on formal and stylistic developments.
MUSIC	MU	431	THE SYMPHONY	3	Studies orchestral music from its beginning. The Mannheim composers, the Viennese classics, the Romanticists, and contemporary composers. Works will be analyzed and their historical, cultural, and philosophical backgrounds discussed.
MUSIC	MU	432	THE CONCERTO	3	Emphasizes the development of the concerto and the stylistic contributions of the great masters. Representative works will be studied in score and recordings.
MUSIC	MU	452	DICTION FOR SINGERS	3	Systematically approaches pronunciation in solo and choral literature in English, Italian and Latin, French and German. The International Phonetic Alphabet will be used with emphasis on those elements of pronunciation which require modification from spoken to singing language. Includes listening, class performance, and teaching experiences.
MUSIC	MU	458	BASIC WOODWIND REPAIR	2	This course is designed to give the student the knowledge and skills needed to repair the majority of problems encountered on woodwind instruments.
MUSIC	MU	459	MARCHING BAND TECH	2	Detailed study of the marching band including philosophy, styles, charting, music, materials, instrumentation, administration, and contemporary techniques.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	471	VOCAL PEDAGOGY	2	A study of the teaching of singing on an individual or group basis. Study of the five elements of singing: respiration, phonation, resonance, articulation, and interpretation. An examination of various approaches to voice teaching, including a study of books on voice pedagogy. Prerequisite: permission of instructor. Dual listed with Mu 571. May be taken for 2 or 3 credits only. >
MUSIC	MU	472	PIANO PEDAGOGY	2	Studies procedures for class and individual instruction: emphasizes the ear approach as the basis for reading, true musical perception and intelligent understanding of the printed page. examines and evaluates materials suitable for the first years of piano study. prerequisite: permission of instructor. >
MUSIC	MU	473	PRACTICUM:PIANO TCHG	1	Introduces class and individual instruction techniques to be used with young beginners. >
MUSIC	MU	475	WOODWIND PEDAGOGY	3	Acquaints students with the woodwind instruments and their solo and ensemble literature. lecture, demonstration, films, tapes, and recordings presented for flute, oboe, bassoon, clarinet, and saxophone. >
MUSIC	MU	476	BRASS PEDAGOGY	3	Studies the techniques, teaching problems, teaching materials, history, and literature related to the brass instruments. >
MUSIC	MU	477	PERCUSSION PEDAGOGY	3	Studies teaching techniques and associated literature of the various percussion instruments. >
MUSIC	MU	481	SVY OF BUS OF MUSIC	3	Presents an overall view of music merchandising; describes the various types of retailing, and acquaints the student with the administration, advertising, marketing processes, and consumer orientation necessary for the education of a person in the retail-wholesale aspects of the music industry. >
MUSIC	MU	482	MUS BUS MGMT SEMINAR	1	A study of the problems and expectations unique to Music Business Management. >
MUSIC	MU	483	MUS MKTG&PROMOTN SEM	1	Gives insight and detailed analysis of marketing and promotion for music stores and music associated organizations. >
MUSIC	MU	484	MUS BUS FIN PLN&CTRL	1	Explores methods for financial planning and control including internal control and store security, payroll records and worker's compensation payroll audits, and a case study of financial reporting and management planning. >
MUSIC	MU	489	INTERNSHIP:MUS MERCH **	1	Provides experiences in the following: (a) a "hands-on experience", (b) an opportunity to observe professionals in the field, (c) a broadening and understanding of problems and careers in the field, (d) an educationally directed field instruction, (e) an opportunity to apply knowledge, theory, and understanding in a job situation, and (f) an opportunity to develop marketable skills. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
MUSIC	MU	497	INDEPENDENT STUDY	0	(See description in section on academic policies.)
MUSIC	MU	455L	CHANGE TOPIC/LAB	0	change laboratory
MUSIC	MU	355	CHANGE TOPIC	0	change topic
MUSIC	MU	355L	CHANGE TOPIC	0	change laboratory topic
MUSIC	MU	102L	FUNDS OF MUSIC LAB	0	fundamentals of music lab
ZZZ	MUB	010	MU BILLING	0	Used for Mansfield University billing purposes, fulltime matriculated students only!
ZZZ	MUG	010	MU GRADUATION	0	Mansfield University graduation course.
RP HLT SCI NUR		250	NURSING&HLTH CARE I	4	An introduction to basic concepts of nursing. Focus is on the role and function of the professional nurse within the health care system and provides an overview of the nursing process and the health care needs of the individual adult client. Laboratory and clinical experiences are offered in a variety of settings and at all levels of prevention.
RP HLT SCI NUR		250L	NURS&HLTH CARE I LAB	0	Nursing & health care I lab.
RP HLT SCI NUR		251	NURSING&HLTH CARE II	4	Builds and focuses on the concepts introduced in NUR 250, assisting the student to further clarify and conceptualize the professional nursing role. The effects of religious, cultural, sociological, and economic events on the development of nursing are examined. Laboratory and clinical experiences are provided in a variety of settings and at all levels of prevention. Prerequisite: Nur 250.
RP HLT SCI NUR		251L	NURS&HLT CARE II LAB	0	Nursing & health care II lab.
RP HLT SCI NUR		260	CONCPTS PROF NURSING	3	A seminar designed to introduce the RN student to the theoretical and philosophical and philosophical bases underlying professional nursing practice. Role theory with an emphasis on the development of the professional self-concept will be explored. Open to RN students only.
RP HLT SCI NUR		360	INTRO NURS RESEARCH	3	Provides an overview of the steps in the research process and the ethical and legal standards involved in scientific inquiry. The purpose, development, and importance of research in the nursing profession is emphasized. In addition, the course provides the knowledge and methods required to critically evaluate research studies and reports. Prerequisite: Ma 105, Nur 250 and 251.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI NUR		370	NURS & ADULT CLIENT	8	Explores the use of the nursing process with adult clients as they encounter actual and potential stressors along with the wellness-illness continuum. The clinical lab provides the student with opportunities to apply the nursing process at all levels of prevention and to observe various roles of the professional nurse within the health care system. Prerequisite: Bio 121, 122, 335, Chm 110, Nur 250 and 251.
RP HLT SCI NUR		370L	NURS&ADLT CLIENT LAB	0	Nursing care of the adult client lab
RP HLT SCI NUR		371	CHILDBEARING/REARING	8	Explores the use of the nursing process with individual and family clients. The focus of the role of the nurse in meeting the health care needs of childbearing and childrearing families at all levels of prevention and in a variety of settings. The course content focuses on growth and development, family issues and assessment, the change process, and stressors for and reaction of individuals and families. Prerequisite: Bio 121, 122, 355, Chm 110 and Nur 251.
RP HLT SCI NUR		371L	CHLDBRNG/REARING LAB	0	Nursing care of childbearing/childrearing families lab
RP HLT SCI NUR		380	PHYSICAL ASSESSMENT	2	Designed to assist the student in obtaining the cognitive and psychomotor skills to assess individuals as they encounter actual and potential stressors along the wellness-illness continuum. Includes both a classroom and learning laboratory component which incorporates principles of interviewing, comprehensive health history, sequential physical assessment, analysis of collected data and documentation. Prerequisite: Bio 121, 122, 355, Chm 110, Nur 250 and 251.
RP HLT SCI NUR		380L	PHYSICAL ASSESMT LAB	0	Nursing physical assessment lab
RP HLT SCI NUR		390	PHARM BAS NURS PRACT	2	Utilizes the nursing process to provide a pharmacological basis for nursing practice. Includes discussion of pathophysiological phenomena and pharmacological interventions including pharmacokinetics, pharmacodynamics, and implications for professional nursing practice. Prerequisite: Bio 121, 122, 355, Chm 110, Nur 250 and 251.
RP HLT SCI NUR		453	CREATIVE INTERVENTNS	3	Several creative interventions will be defined, described, and studied. These interventions will include humor and laughter, storytelling, music therapy, relaxation therapy, clowning and creative movement. The nursing role and nursing process involved in these interventions will be explored. The nursing student will apply the use of one creative intervention to the clinical setting. Prerequisite: Nur 250, 251 and 370 or 371
RP HLT SCI NUR		454	GERONTIC/NORML AGING	3	Provides both the theoretical content and interaction with the well-elderly. Assessing and assisting the aging to maintain wellness will be the major focus. Prerequisite: Soc 101.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI	NUR	460	CURRENT ISSUES	3	A seminar which examines current trends, controversies, questions, and dilemmas of professional nursing. The influence of political, ethical/legal, economic, and societal aspects on nursing practice and education are explored. Prerequisite: junior level nursing courses. >
RP HLT SCI	NUR	470	MULTISYST STRESSORS	9	Examines the nursing process to care for adult clients and families with acute and multiple health problems which penetrate the lines of resistance. Prerequisite: junior level nursing courses >
RP HLT SCI	NUR	470L	MULTISYS STRESS LAB	0	Nursing care of the client with multisystem stressors lab >
RP HLT SCI	NUR	471	COMMUNITY HLTH NURS	6	Explores the scope of community health nursing considering the multiple frameworks of nursing theory and process, family theory and practice, and public health principles. Emphasis is placed on studying the relationships between individual, family, and community health care needs. Prerequisite: junior level nursing courses >
RP HLT SCI	NUR	471L	COMMUNITY HLTH LAB	0	Community health nursing lab >
RP HLT SCI	NUR	472	MENTAL HLTH NURSING	6	Focuses on the mental health concepts relative to the nursing care of clients. The nursing process is examined and applied primarily with individuals, but also includes families, groups, and communities and takes place in a variety of settings. Emphasis is placed upon the nurses role of collaboration with other health care professionals in meeting the health care needs of clients at all levels of prevention. Prerequisite: junior level nursing courses >
RP HLT SCI	NUR	472L	MENTAL HLTH NURS LAB	0	Mental health nursing lab >
RP HLT SCI	NUR	480	LEADERSHP&MANAGEMENT	3	Introduces the student to the theoretical foundation for the practice of independent and interdependent nursing by discussing current leadership and management concepts and their relevance to professional nursing practice. Prerequisite: junior level nursing courses. >
RP HLT SCI	NUR	497	INDEPENDENT STUDY	0	(see description in section on academic policies.) >
RP HLT SCI	NUR	420	TEACHING IN NURSING	3	Examines teaching and learning principles, and educational issues. Students will practice teaching/learning strategies in a nursing education or nursing practice setting. Focus will be on the client or nursing education. Prerequisite: Nur 370 and 371. >
PHILOSOPHY PHL		201	INTRO TO PHILOSOPHY	3	Examines the basic foundational beliefs of people in the religious, scientific, ethical, and political dimensions of life. Exercises the student's ability to identify his/her own basic beliefs and subject these to critical evaluation. Examples of issues discussed are whether ethical values are relative, the existence of God, the nature of justice, and human freedom. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PHILOSOPHY	PHL	202	CONTEMP MORAL PROBS	3	Analyzes arguments pertaining to difficult contemporary issues. Emphasis is on clarifying and evaluating the conclusions of such arguments. Discussion subjects include: abortion, euthanasia, environmental protection, the arms race, the rights of women and minorities, censorship and pornography, etc. Course goal is to enable the student to assess the strengths and weaknesses of the various positions on each issue. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	230	INTRO TO LOGIC	3	Studies the basic principles of deductive and inductive thinking. Includes informal as well as formal logic. Syllogistic reasoning and elementary symbolic logic may be introduced. Fallacies in advertising, statistical arguments, political campaigns, and everyday speech are examined.
PHILOSOPHY	PHL	280	PHILOS OF RELIGION	3	Analyzes the validity of various proofs of God's existence. Also examines religious language, the difference between faith and reason, the question of religious authority, and the reasonableness of the religious lifestyle. Prerequisite: Phl 201.
PHILOSOPHY	PHL	300	PHILOS OF THE ARTS	3	A detailed survey of both classical and modern aesthetic theories along with a criticism of each. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	305	PHILOSOPHY AND FILM	3	Aesthetic, ethical and epistemological issues surrounding the moving image. Topics include: realism, neo-realism, the new wave, feminism and the influence of existential and marxist philosophies on cinematic theory. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	310	SOC & POLITICAL	3	An analysis of philosophical concepts and arguments presupposed in social and political discourse. Topics include: liberty and its limits, human rights, economic and social justice, the nature of political obligation and disobedience. Emphasis is on evaluating philosophical theories from both contemporary and historical sources. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	320	PHILOSOPHY OF LAW	3	An analysis of philosophical concepts and arguments presupposed in legal discourse and reasoning. Topics will include: the nature of law and legal decision making; theories of justice, privacy, responsibility and punishment. Emphasis is on examining specific legal rises from both contemporary and historical sources. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	330	EASTRN APPRO/REALITY	3	An examination of the philosophical perspective of the Eastern mind as exhibited in Hinduism, Buddhism, Taoism, Confucianism, Zen Buddhism. Primary focus is on the difference between the Eastern and Western modes of looking at the world. Prerequisite: Phl 201 or permission of instructor.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PHILOSOPHY	PHL	340	ETHICS	3	Examines how to make rational decisions in situations with a moral dimension. Examines traditional and contemporary applied problems in ethics, e.g. sexual morality, cheating. Examines the moral implications of various lifestyles. Course goal is to assist students in developing the ability to function as morally autonomous persons. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	345	AMERICAN PHILOSOPHY	3	Examines the main movements in American thought, especially the pragmatic. Course focus is on the relation between American philosophy and other aspects of the American experience and character. Classical and contemporary figures are treated. Examines specifically American thought outside of academic philosophy, e.g. in economics, literature, and psychology. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	350	THE CONCEPT OF MIND	3	Investigates various philosophical theories concerning the nature of mind. Topics include: the possibility of artificial intelligence, the nature of consciousness, emotion, and imagination, dreaming, mind-brain identity, the concept of the unconscious, animal intelligence, the mind as program, and human freedom. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	360	CONCEPT OF KNOWLEDGE	3	An examination of some philosophical concepts and arguments presupposed in discourse about knowledge. Topics include: the possibility that we do not know anything; problems of perception and illusion; problems of evidence acquisition; the nature of scientific knowledge; skepticism; astrology and religion; recent research in cognitive science. Major philosophical theories from both contemporary and historical sources are utilized. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	365	SCIENCE AND VALUES	3	Examines problems raised by science and technology. Topics will include: the ethics of experimentation; racism and sexism in science; the limits to technological growth; ecological and nuclear disaster; creationism versus evolutionism; ugliness and beauty in a technological environment. This course is geared to both specialists and non-specialists in philosophy or science. Prerequisite: Phl 201 or permission of instructor.
PHILOSOPHY	PHL	370	PHILOS OF LANGUAGE	3	An examination of the logical structures of descriptive and nondescriptive linguistic activities. Emphasis is on the picture theory of representational language as presented in Ludwig Wittgenstein's Tractatus Logico-Philosophicus. Prerequisite: Phl 201 or permission of instructor.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
PHILOSOPHY	PHL	380	HEALTH CARE ETHICS	3	An examination of the arguments designed to provide solutions to moral problems commonly faced by health care professionals. Topics will include: lies to the sick and dying; abortion; euthanasia and the treatment of defective newborns; privacy and confidentiality; suicide intervention; paternalism and limiting liberty; allocation of scarce health care resources; strikes for better wages and working conditions; experimenting with human subjects; nurse/physician and nurse/client relationships; moral decision-making. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	390	EXISTENTIALISM	3	Analyzes this twentieth-century movement which emphasizes human uniqueness and value. Existential themes include freedom, commitment, self-determination, and authenticity. Major philosophers considered are Keirkegaard, Nietzsche, Heidegger, and Sartre. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	420	CLASSIC GREEK PHILOS	3	A serious investigation of Western philosophy from the beginning through Aristotle. The relationships between philosophy and other areas of Greek culture are examined. Extended treatments of the pre-Socratics, Plato, and Aristotle are presented. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	422	TOPICS MODERN PHILOS	3	Includes study of the philosophical thought of the early scientists whose investigations culminated in the contemporary scientific method. Philosophers of the 17th and 18th centuries are examined, from Thomas Hobbes to Immanuel Kant. Problem areas of this period are: the mind-body relationship, the possibility of knowledge, perception, and the status of ideas. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	423	CONTEMPORARY PHILOS	3	Analysis of the defining features of major contemporary philosophical movements, with attention primarily to logical positivism, linguistic analysis, pragmatism, and existentialism. Prerequisite: PHL 201 or permission of instructor.
PHILOSOPHY	PHL	450	INTERNSHIP	**	(Obtain information from Philosophy chairperson.)
PHILOSOPHY	PHL	490	SEMINAR	0	A supervised investigation of a specialized problem in philosophy or into the writings of a specific philosopher or philosophic movement. Prerequisite: PHL 201 or permission of the instructor.
PHILOSOPHY	PHL	497	INDEPENDENT STUDY	0	See description in section on Academic Policies.
PHYSICS	PHY	130	HOUSEHOLD PHYSICS	3	Introduction to the basic concepts of physics by utilizing devices and appliances used in the home today.
PHYSICS	PHY	130L	HOUSEHOLD PHYS LAB	0	Household physics lab

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PHYSICS	PHY	151	CONCEPTUAL PHYS I	4	An introduction to both classical and modern physics without the use of calculus. Designed to enable the student to appreciate the role of physics in society. >
PHYSICS	PHY	151L	CONCEPT PHYS I LAB	0	Conceptual physics I lab >
PHYSICS	PHY	152	CONCEPTUAL PHYS II	4	Continuation of PHY 151. >
PHYSICS	PHY	152L	CONCEPT PHYS II LAB	0	Conceptual physics II lab >
PHYSICS	PHY	160	PHYS OF MUSICL SOUND	3	A non-mathematical approach to the physical principles involved in the generation, transmission, and detection of sound. >
PHYSICS	PHY	160L	PHY OF MUS SOUND LAB	0	Physics of musical sound lab >
PHYSICS	PHY	165	PHYS ALLIED HLTH SCI	3	Designed to give students in the Allied Health Sciences the physics background needed for their professional work. Selection of material is based on the appropriateness of the life sciences without limiting basic concepts found in all introductory physics courses. >
PHYSICS	PHY	165L	PHYS ALLIED HLTH LAB	0	Physics for the allied health sciences lab >
PHYSICS	PHY	170	INTRO ELEC APPARATUS	3	Elementary principles of electrical circuits are taught in lecture and extensively applied in the laboratory by building kits (radio, meters, amplifiers, etc.) of the student's choice. Study for third and second class FCC licenses is sometimes available. >
PHYSICS	PHY	170L	INTRO ELEC APPAR LAB	0	Introduction to electronic apparatus lab >
PHYSICS	PHY	180	QUANT MTDS PHYS SCI	3	Introduction to the application of mathematical analysis to physical situations. Problem solving using algebraic, statistical, calculus, and computer methods. Corequisite: Ma 140. >>
PHYSICS	PHY	180R	QUANT MTD PHY RECITA	0	Quantitative Methods for Physical Sciences recitation. >
PHYSICS	PHY	188	GENERAL PHYSICS I	4	A three-semester calculus physics course emphasizing classical concepts. Selected topics in mechanics, heat, electrostatics, electromagnetism, waves and optics. Prerequisite: Ma 140 or taken concurrently with Phy 188. >
PHYSICS	PHY	188L	GENERAL PHYS I LAB	0	General physics I lab >
PHYSICS	PHY	191	PHYSICS I	4	A one-year sequential calculus physics course discussing classical mechanics, fluids, thermodynamics, classical electricity and magnetism, optics and waves, modern physics. Application of physics to life science is made in problem selection and laboratory experimentation. Corequisite: Ma 140 >
PHYSICS	PHY	191L	PHYSICS I LAB	0	Physics I lab >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
PHYSICS	PHY	192	PHYSICS II	4	Continuation of Phy 191. Prerequisite: Phy 188 or 191. >
PHYSICS	PHY	192L	PHYSICS II LAB	0	Physics II lab >
PHYSICS	PHY	211	GENERAL PHYSICS II	4	Continuation of PHY 188 or 191. >
PHYSICS	PHY	211L	GENERAL PHYS II LAB	0	General physics II lab >
PHYSICS	PHY	212	GENERAL PHYSICS III	4	Continuation of PHY 211. >
PHYSICS	PHY	212L	GENERAL PHYS III LAB	0	General physics III lab >
PHYSICS	PHY	250	RESTLESS ATMOSPHERE	3	An introduction to dynamical meteorology which includes general circulation theory, energy budget, instrumentation, weather modification. Prerequisite: high school physics or permission of instructor. >
PHYSICS	PHY	250L	RESTLESS ATMOSPH LAB	0	The restless atmosphere lab >
PHYSICS	PHY	311	MODERN PHYSICS I	3	An introduction to 20th-century physics, including the structure of atoms and nuclei, basic ideas of quantum mechanics and solid state theory. Prerequisite: Phy 188 and 211. >
PHYSICS	PHY	312	MODERN PHYSICS II	3	Continuation of PHY 311. >
PHYSICS	PHY	313	PHYSICAL MECHANIC I	3	An analytic treatment of classical mechanics covering the methods of statics and dynamics of rigid bodies with application to physical problems; small oscillations, generalized coordinates and Lagrange's equations. Prerequisite: Phy 188, Ma 240 and 311. >
PHYSICS	PHY	314	PHYSICAL MECHANIC II	3	Continuation of PHY 313. >
PHYSICS	PHY	315	EXPER PHYSICS I	3	Experiments in electrical measurements and circuit elements, optics and atomic physics. Prerequisite: Phy 211. >
PHYSICS	PHY	315L	EXPER PHYSICS I LAB	0	Experimental physics I lab >
PHYSICS	PHY	316	EXPER PHYSICS II	3	Continuation of PHY 315. >
PHYSICS	PHY	316L	EXPER PHYS II LAB	0	Experimental physics II lab >
PHYSICS	PHY	317	PHYSICAL OPTICS	3	Wave phenomena, electromagnetic theory of light, interference, diffraction, polarization and nonlinear optics. Prerequisite: Phy 212 and Ma 311. >
PHYSICS	PHY	318	THERMODYNAMICS	3	An introduction to thermal physics and kinetic theory. Prerequisite: Phy 212 and Ma 311. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PHYSICS	PHY	319	INTR SOLID STATE	3	A brief summary of the theory underlying the behavior of solids. Emphasis on transport theory, interaction of light and matter, semiconductor devices, superconductors and lasers. Prerequisite: Phy 311. >
PHYSICS	PHY	320	ACOUSTICS	3	Fundamentals of sound waves including generation, transmission, and detection of sound. >
PHYSICS	PHY	320L	ACOUSTICS LAB	0	Acoustics lab >
PHYSICS	PHY	321	SELECTED TOPICS I	3	Any selected topic not sufficiently covered in a general course. >
PHYSICS	PHY	322	SELECTED TOPICS II	3	Same as PHY 321. >
PHYSICS	PHY	333	SPACE DYNAMICS	3	Application of Newtonian mechanics to solution of actual problems in satellite trajectories and orbit; celestial mechanics and navigation. Prerequisite: Phy 188 and Ma 311. >
PHYSICS	PHY	334	ASTROPHYSICS	3	Application of physics and mathematics to the field of astronomy. A study of stellar models, stellar evolution, radio astronomy and recent discoveries in astronomy. Prerequisite: Phy 311 and Ma 311. >
PHYSICS	PHY	351	SOLAR ENERGY UTILIZA	3	Development of the details of solar energy as an alternate technology including physical and engineering principles. >
PHYSICS	PHY	401	ELECT & MAGNETISM I	3	Foundations of electromagnetic theory including electrostatics, dielectric theory, magnetic properties. Prerequisite: Ma 240, 311 and Phy 211. >
PHYSICS	PHY	402	ELECT & MAGNETISM II	3	Continuation of PHY 401. >
PHYSICS	PHY	407	INTRO QUANTUM MECHAN	3	An introduction to wave mechanical and axiomatic approaches with simple applications. Prerequisite: Ma 311 and Phy 311. >
PHYSICS	PHY	408	ATOMIC & NUCLEAR PHY	3	Continuation of PHY 407; physical applications of quantum mechanics to atomic and nuclear physics. >
PHYSICS	PHY	415	EXPER PHYSICS III	3	Research problems are assigned to the student on an individual basis. >
PHYSICS	PHY	415L	EXPR PHYSICS III LAB	0	experimental physics III lab >
PHYSICS	PHY	416	EXPER PHYSICS IV	3	Same as PHY 415. >
PHYSICS	PHY	416L	EXPER PHYS IV LAB	0	experimental physics IV lab >
PHYSICS	PHY	450	CURRNT SCI PHENOMENA	0	This course permits students to take advantage of important temporary phenomena. Thus credit hours, period and time of presentation, and instructional personnel must vary. Selection of topics will be based upon intrinsic value and interest as well as importance for other courses. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PHYSICS	PHY	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
PHYSICS	PHY	191R	PHYSICS I RECITATION	0	Physics I recitation. >
PHYSICS	PHY	211R	GEN PHYS II RECITATN	0	General Physics II recitation. >>
POLIT/ECON	PSC	100	INTRO TO POLITICS	3	Examines major concepts, institutions, processes, actors, and issues in modern politics. Emphasis on universal trends and themes. >
POLIT/ECON	PSC	101	AMERICAN POLITICS	3	Examines political principles and processes, governmental institutions and mechanics of governing in the United States. >
POLIT/ECON	PSC	102	STATE AND LOCAL POL	3	Examines political principles and processes, governmental institutions, and mechanics of governing the states and their local unites. >
POLIT/ECON	PSC	210	WORLD POLITICS	3	Examines international relations in our time. Emphasis on the goals and behaviors of nation-states, the policies of important countries, the causes of regional conflicts, and the search for peace, security, order and justice. >
POLIT/ECON	PSC	212	COMPARATIVE POLITICS	3	Examines the governments and politics of representative nations. Emphasis on political cultures, processes, institutions, and policies, as well as forces creating consensus and conflict, stability, and instability. >
POLIT/ECON	PSC	220	PUBLIC POLICY	3	Examines the relationship between politics and economics in modern society. Emphasis on democracy and capitalism in America, and on the role of government in the U.S. economy. >
POLIT/ECON	PSC	222	PUBLIC ADMINISTRATN	3	Examines basic principles, forms, and functions of bureaucracy in modern government. Emphasis on issues arising from the interaction of organizations with social and political environments. >
POLIT/ECON	PSC	228	POLITICAL ECONOMY	3	Examines the relationship between politics and economics in modern society. Emphasis on democracy and capitalism in America, and on the role of government in the U.S. economy. >
POLIT/ECON	PSC	235	SCOPE AND METHODS	3	Examines both the subject matter of political science as a discipline and associated research methods. Emphasis on preparation and evaluation of a research project. >
POLIT/ECON	PSC	302	PRESIDENT & CONGRESS	3	Examines the Executive and Congress as both governmental and political institutions, as well as, the ongoing relationship between them. >
POLIT/ECON	PSC	303	PARTIES/CAMPAGN&ELEC	3	Examines the roles of parties and groups as links between the people and government in America. Emphasis is on campaigns and elections. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
POLIT/ECON	PSC	310	U S FOREIGN POLICY	3	Examines the content and process of U S foreign policy since World War II. Emphasis on interests, objectives, and strategies in key regions, as well as domestic forces and constraints. >
POLIT/ECON	PSC	315	CHANGE TOPIC	3	Examines in-depth the government and politics of a particular country or group of countries (e.g. Canada, Communist systems, developing countries, the European Community). >
POLIT/ECON	PSC	320	TOPICS PUBLIC POLICY	3	Examines the public policy process from issue, creation to program evaluation for selected topics such as civil rights, equal opportunity, family services, occupational and product safety, and victim's compensation. >
POLIT/ECON	PSC	331	WESTERN POL THOUGHT	3	A study of fundamental problems in Western political thought. Emphasis on such concepts as power, authority, obedience, freedom, equality, justice, and the ideal society. >
POLIT/ECON	PSC	333	MODERN IDEOLOGIES	3	Examines the development and impact of modern ideologies from the French Revolution to the present. Emphasis on liberalism, conservatism, socialism, anarchism, nationalism, and less prominent variations of these. >
POLIT/ECON	PSC	334	PUB OPINION&POL BEHA	3	Examines the opinion formation process, linkages of opinion and behavior, and the role of public opinion in the political process. Emphasis on preparation, administration, and evaluation of a public opinion survey. >
POLIT/ECON	PSC	404	CONSTITUTIONAL LAW	3	Examines general principles of the U.S. constitutional system and the role of the judiciary in interpreting individual rights. >
POLIT/ECON	PSC	410	GLOBAL ISSUES	3	Examines global interdependence in the context of such issues as ecology, technology, human rights, arms control, development, international law and institutions. Emphasis is on interdisciplinary perspectives and approaches. >
POLIT/ECON	PSC	450	INTERNSHIP	0	Designed to give actual experience in the work of an agency and an understanding of the agency's position in the community. Further, the intern should become aware of the agency's philosophy and goals, the formal and informal organization of the agency, and the role for the agency in the political system. >
POLIT/ECON	PSC	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
PSYCHOLOGY	PSY	101	INTRO TO GENL PSYCH	3	Designed to familiarize students with the application of scientific psychology to human life. Emphasis is on "normal" behavior and its antecedents. It includes the study of broad categories of human behavior through various psychological models. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
PSYCHOLOGY	PSY	151	INTRO APPL OF PSYCH	1	Taken by psychology majors in conjunction with Psy 101. Designed to acquaint the student with the major, graduate training options, and career possibilities in psychology and related fields. >
PSYCHOLOGY	PSY	201	TESTS & MEASUREMENTS	3	A study of the theory and techniques of behavior assessment, emphasizing computerized methods. It surveys psychological tests and their applications. Prerequisite: Psy 101, Ma 105 is recommended. >
PSYCHOLOGY	PSY	202	SURVEY & DATA ONLY	3	The study of nonexperimental and survey techniques used in the behavioral sciences. Emphasis is on survey design, computerized data analysis using SPSS-X, and report writing. Prerequisite: Psy 101, 201 and Ma 105. >
PSYCHOLOGY	PSY	203	TELE SURVEY RESEARCH	3	This course provides training in applied social research. Students are directly involved in construction an interview schedule, selecting a sample, conducting telephone interviews, coding and analyzing data, and writing a report. >
PSYCHOLOGY	PSY	210	PSY FAMILY RELATIONS	3	This survey course covers the psychological dynamics of the family as a unit, parent-child interactions, the effect of developmental events on the psychology of the family, divorce, single parent families, etc. Class discussion, psychodrama, and video tapes are used to illustrate these concepts. >
PSYCHOLOGY	PSY	212	HUMAN SEXUALITY	3	Provides a survey of scientific findings in the area of human sexual behavior, including topics of current interest and controversy, as well as, the traditional issues. >
PSYCHOLOGY	PSY	250	EXPER DESIGN I	4	Studies the design of controlled experiments as well as quasi-experiments in the behavioral sciences. Prerequisite: Ma 105 and Psy 101. >
PSYCHOLOGY	PSY	250L	EXPER DESIGN I LAB	0	Experimental design I lab >
PSYCHOLOGY	PSY	290	LIFE SPAN DEVELOPMNT	3	Provides a broad spectrum of developmental processes, starting with conception and continuing through the life span to the elderly. The effects of the environment and heredity on biological, psychological, and sociological development are also studied. Prerequisite: Psy 101 or permission of instructor. >
PSYCHOLOGY	PSY	291	ABNORMAL PSYCHOLOGY	3	Provides a general introduction to the field of abnormal psychology. Major models of psychopathology and the causes and symptoms of abnormal thinking and behavior are considered. Prerequisite: Psy 290 or permission of instructor. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
PSYCHOLOGY	PSY	300	HELPING SKILLS	3	Designed to help students develop effective hearing and interpersonal skills for conducting counseling. The primary emphasis of this course is on (1) the application of counseling and psychological theory to actual casework and (2) the development of counseling skills through observing and conducting peer counseling sessions. Prerequisite: Psy 101 and upper division standing.
PSYCHOLOGY	PSY	301	THEORIES COUNSELING	3	Considers the major theories of psychological treatment and behavior change. The major theories covered will include: psychodynamic, humanistic, transactional analysis, behavior, and cognitive therapies. Special emphasis will be placed on utilizing therapeutic models in group treatments. Prerequisite: Psy 101 and upper division standing.
PSYCHOLOGY	PSY	310	SOCIAL PSYCHOLOGY	3	Covers the individual aspects of social behavior. Attention is focused on problems in perception, thinking, and motivation. The following topics are examined: theories of person perception, attitude formation, personality structure, motivational determinants of group membership and social conformity, social roles and leadership. Prerequisite: Psy 101.
PSYCHOLOGY	PSY	311	INTRO SML GROUP PROC	3	Basic principles of small group process are examined through didactic and experimental approaches. Applications in various settings are examined.
PSYCHOLOGY	PSY	312	DEVIANT BEH&SOC PROC	3	Psychological theories of deviant behavior are studied. Major areas include: sexual deviations, prostitution, juvenile delinquency, suicide, obesity, drug addiction, etc., and the various treatment modalities. Prerequisite: Psy 101.
PSYCHOLOGY	PSY	313	PSY OF INTERVIEWING	3	An introduction to theoretical, methodological, and technical considerations of interviewing from a psychological perspective. Designed for those interested in the applications of interviewing in an industrial or organizational setting. Skill development is emphasized.
PSYCHOLOGY	PSY	320	CHILD PSYCHOLOGY	3	An in-depth study of development starting with conception and ending with adolescence. Physical, social/emotional, and cognitive development receive primary emphasis.
PSYCHOLOGY	PSY	320L	CHILD PSYCHOLOGY LAB	0	Provides students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. May be taken with or without Psy 320. Prerequisite: Psy 250 or equivalent and prior or concurrent course in experimental psychology.
PSYCHOLOGY	PSY	321	ADOLESCENT PSY	3	Begins with changes occurring as a result of puberty and ends with the transition to young adulthood. The results of the interaction between heredity and the environment as they effect adolescent development are a major focus of the course.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PSYCHOLOGY	PSY	322	GERONTOLOGICAL PSYCH	3	Effects of aging on individuals and their interactions with their environment and society are the major focus of this course. Adaptation to the changes that occur with aging is also emphasized. >
PSYCHOLOGY	PSY	323	COGNITIVE&MORAL DEV	3	Acquaints students with basic concepts and constructs in cognitive and moral development. It focuses on current theories and research such as the work of Piaget and Kohlberg. >
PSYCHOLOGY	PSY	324	ADULT DEVELOPMENT	3	A study of the stages of young and middle adulthood. Interindividual differences and changes within the individual, as they occur over the first two stages of adulthood, are emphasized. >
PSYCHOLOGY	PSY	330	DRUGS AND BEHAVIOR	3	A comprehensive overview of drug use and abuse in American society. Students are provided with a behavioral framework for understanding drug consumption through review of major pharmacological, and social variables. Prerequisite: Psy 101. >
PSYCHOLOGY	PSY	331	PSY OF CONSCIOUSNESS	3	Emphasizes research and applications relevant to the psychology of consciousness and altered states. Prerequisite: Psy 101 or equivalent and junior standing. >
PSYCHOLOGY	PSY	332	PSYCH OF STRESS MGMT	2	Provides an overview of stress and stress-related dysfunction. Techniques for prevention of stress are emphasized through demonstration and student participation. Prerequisite: Psy 101 or equivalent and junior standing or permission of instructor. >
PSYCHOLOGY	PSY	333	INTRO TO BIOFEEDBACK	1	Theory and applications of biofeedback technology to pain, psychosomatic, and other stress-related problems. Prerequisite: Psy 101 and junior standing or permission of instructor. >
PSYCHOLOGY	PSY	350	EXPER I:LEARNING	3	Surveys theories, research methodologies, and findings in the area of learning. May be taken with or without Psy 350L. Prerequisite: Psy 250 or permission of instructor. >
PSYCHOLOGY	PSY	350L	EXPER I:LEARNING LAB	1	Provides students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. May be taken with or without Psy 350. Prerequisite: Psy 250 or equivalent and prior or concurrent course in experimental psychology. >
PSYCHOLOGY	PSY	351	EXPER II:PERCPT PROC	3	Basic phenomena of the senses, their physiological correlates, and integration into complex perception are reviewed. May be taken with or without Psy 351L. Prerequisite: Psy 250 or permission of instructor. >
PSYCHOLOGY	PSY	351L	EXP II:PERC PROC LAB	1	Provides students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. May be taken with or without Psy 351. Prerequisite: Psy 250 or equivalent and prior or concurrent course in experimental psychology. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
PSYCHOLOGY	PSY	410	INDUSTRL&ORGANIZ	3	Examines the application of psychology to business, industry, and marketing. Prerequisite: Psy 101. >
PSYCHOLOGY	PSY	421	DEATH AND DYING	3	Provides an overview of the psychological aspects of death and dying in our society. Topics include attitudes toward and preparation for death, the terminally ill patient, funeral rituals and burial, mourning and grief, and suicide and euthanasia. Classroom material is supplemented by the student's self-exploration and writing on feelings, attitudes, and beliefs about death. >
PSYCHOLOGY	PSY	422	PSYCHOLOGY OF WOMEN	3	An in-depth study of how psychological development, life experiences, and social change interact to affect women's development across the life span. Dual listed with 522. >
PSYCHOLOGY	PSY	430	THEORIES PERSONALITY	3	Considers major personality theories ranging from psychoanalytic to humanistic and behavioral models. Papers and discussion concentrate on examining merits and limitations of various theories. >
PSYCHOLOGY	PSY	460	PHYSIOLOGICAL PSYCH	3	Emphasizes physiological aspects of behavior through knowledge of the neurological structure and function. May be taken with or without Psy 460L. Prerequisite: Psy 250 or permission of instructor. >
PSYCHOLOGY	PSY	460L	PHYSIOLOGICL PSY LAB	1	Provides students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. May be taken with or without Psy 460. Prerequisite: Psy 250 or equivalent and prior or concurrent course in experimental psychology. >
PSYCHOLOGY	PSY	445	ADV COUNSELING TECH	3	Provides advanced training in counseling skills for students in the helping professions (nursing, social work, counseling/clinical psychology, criminal justice, etc.). Emphasis placed on diagnosis and treatment of clients requiring long-term intervention. Special emphasis will be placed on diagnosis and treatment of personality disorders. Prerequisite: Psy 291 and 300 or permission of instructor. Dual listed with 545. >
PSYCHOLOGY	PSY	461	EXPER SOCIAL PSYCH	4	Research designs and methods for the study of problems in social psychology are critically examined. Covers experimental projects with questionnaires, scales, interviews, and observation methods. Problems of sampling and data analysis are also considered. Prerequisite: Psy 101 or permission of instructor. >
PSYCHOLOGY	PSY	462	BEHAVIOR MODIFICATN	3	Provides an introduction to a variety of techniques for altering behavior based on learning principles. May be taken with or without Psy 462L. Prerequisite: Psy 101. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
PSYCHOLOGY	PSY	462L	BEHAV MODIFICATN LAB	1	Provides students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. May be taken with or without Psy 462. Prerequisite: Psy 250 or equivalent and prior or concurrent course in experimental psychology. >
PSYCHOLOGY	PSY	490	SENIOR SEMINAR	3	Psychology majors are presented the formal opportunity to explore professional functions of psychologists and human service workers in related roles, as well as, various areas of current interest in applied psychology. Prerequisite: Senior standing or permission of instructor. >
PSYCHOLOGY	PSY	491	HUMAN RESOURCE MGMT	3	Review and discuss current issues in personnel administration and human resource management. Practical demands of the work situation are emphasized. Prerequisite: upper division status or permission of instructor and chairperson. >
PSYCHOLOGY	PSY	495	PRE-PROF EXPERIENCE	6	Provides practical experience and beginning skills to selected students. The experience will focus on applied skills, community service or research work in settings appropriate to the students' interests and curriculum, including mental health and other human service programs, hospitals, personnel offices, and industrial or governmental agencies. The goal is to relate theoretical learning to practical application. Prerequisite: Consent of department chairperson based on the recommendations of the department preprofessional committee. >
PSYCHOLOGY	PSY	496	RESEARCH APPRENTCSHP	6	Designed to provide students with intensive experiences in empirical research under close supervision. Qualified students will become involved in ongoing research projects, working along with experienced researchers. Students are encouraged to serve their apprenticeship at other campuses or institutional settings. >
PSYCHOLOGY	PSY	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
PSYCHOLOGY	PSY	305	EDUCATIONAL PSYCH	3	A study of the application of learning theory principles to the educational and institutional setting. Provides demonstrations and field experiences to enhance the applicability of these principles. Prerequisite: Psy 101. >
GEOG/GEOL	RPL	102	INTRO REGIONAL PLNG	3	Examines regional planning as a tool for shaping the future man-made and natural environment. Introduces man/land relationships that affect community well-being, the tools used by government in managing these relationships for public benefit; and programs, politics, and activities required in recent planning legislation. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
GEOG/GEOL	RPL	342	LAND-USE POLICY	3	An interpretive synthesis of the precepts and concepts of land-use that encourage and discourage geographic patterns on a changing landscape. Familiarizes the student with the economic, social, and political processes that are especially important for planning which is intended to move regions toward a particular goal. >
GEOG/GEOL	RPL	352	RECREA LAND-USE PLAN	3	An inquiry into the meaning, types, and demands of society's recreational activities. Planning emphasis will be given to the definition of problems and purposes and to the consideration of alternative resources for recreation, both physical and cultural. >
GEOG/GEOL	RPL	460	TRANSPORT SYSTEMS	3	Analysis of the spatial principles and networks of transport systems, including factors of route location, theories of interaction, and the role of transport in space-economy. >
GEOG/GEOL	RPL	480	CHANGE TOPIC	3	Discussion of selected problems, techniques, and research in the field of urban and regional planning. >
GEOG/GEOL	RPL	494	PLANNING SEMINAR	3	Practical application of techniques learned in previous courses to typical planning problems. >
GEOG/GEOL	RPL	496	PLANNING INTERNSHIP	**	Provides experience in regional or corporate planning offices to apply knowledge and skills of planning under the supervision of qualified planners. Observations, conferences, and an evaluation is made by the supervisory agency. >
GEOG/GEOL	RPL	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
RP HLT SCI	RTH	101	RESPIRATORY THPY I	3	Examines the scientific principles underlying the safe administration of medical gases and aerosols to patients in the hospital setting. >
RP HLT SCI	RTH	102	RESPIRATORY THPY II	4	Classroom instruction and laboratory practice of fundamental respiratory care assessment and therapeutic procedures. Assessment topics include: chest physical examination, chest x-rays, electrocardiograms, and bedside pulmonary function tests. Therapeutic topics include: oxygen and aerosol therapy, hyperinflation therapies, chest physical therapy, airway management, and cardiopulmonary resuscitation. Prerequisite: RTH 101. >
RP HLT SCI	RTH	102L	RESPIR THPY II LAB	4	Classroom instruction and laboratory practice of fundamental respiratory care assessment and therapeutic procedures. Assessment topics include chest physical examination, chest x-rays, electrocardiograms, and bedside pulmonary function tests. Therapeutic topics include oxygen and aerosol therapy, hyperinflation therapies, chest physical therapy, airway management, and cardiopulmonary resuscitation. Prerequisite: RTH 101. >
RP HLT SCI	RTH	103	RESPIRATORY THPY III	4	Classroom instruction and laboratory practice in the management of patients requiring continuous mechanical support of ventilation. Prerequisite: RTH 102. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI RTH		103L	RESPIR THPY III LAB	0	respiratory therapy iv. >
RP HLT SCI RTH		104	RESPIRATORY THPY IV	3	Examines cardiovascular problems, advanced cardiopulmonary monitoring techniques, special procedures, pulmonary rehabilitation, and home care. Prerequisite: RTH 103. >
RP HLT SCI RTH		107	CLINICAL PRACT I	1	Introduction to the clinical practice of respiratory care. Provides experience in the administration of oxygen, aerosols, hyperinflation therapies, chest physical therapy, and artificial airway care. Examines the fundamentals of arterial blood gas sampling and analysis. Prerequisite: RTH 101 concurrent with 102. >
RP HLT SCI RTH		108	CLINICAL PRACT II	3	Designed to achieve competence in the administration of routine respiratory therapy modalities and competence in arterial blood gas sampling and analysis. Students will accompany pulmonary physicians on patient rounds and rotate through other clinical areas of the hospital. Prerequisite: RTH 102 and 107. >
RP HLT SCI RTH		109	CLINICAL PRACT III	2	Application of respiratory care to the patient in the critical care unit. Emphasis is on the management of adult and pediatric patients requiring mechanical support of ventilation. Prerequisite: RTH 108 concurrent with RTH 103. >
RP HLT SCI RTH		110	CLINICAL PRACT IV	3	Continuation of RTH 109. Designed to achieve competence in the performance of all critical care procedures performed by the respiratory therapists. Prerequisite: RTH 109 concurrent with RTH 104. >
RP HLT SCI RTH		201	PULMONARY PHYSIOLOGY	3	Detailed discussion of the fundamental physiology of the human respiratory system. Techniques used in the hospital pulmonary function laboratory to assess abnormal lung function are described and demonstrated, and an interpretation of the results of pulmonary function testing and arterial blood gas analysis is included. Prerequisite: Bio 121. >
RP HLT SCI RTH		204	PHARMACOLOGY	2	Examines the action and uses of pharmacologic agents. Emphasis is on drugs used in the diagnosis and treatment of cardiac and pulmonary disease, and includes the calculation of dosages and solutions. >
RP HLT SCI RTH		206	INTRO TO DISEASE	2	Introduction to the disruption of life's healthful mechanisms. Topics include: cellular and tissue response to injury, inflammation and repair, circulatory disease, immunopathology, neoplasia, genetic diseases, and infectious disease. Provides knowledge of the fundamental processes that underlie disease to facilitate a better understanding of specific diseases encountered later. Prerequisite: Bio 103 and 104. >>

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI	RTH	207	PULMONARY DISEASE	2	Introduction to common pulmonary disorders and their management. Topics include chronic obstructive pulmonary disease, restrictive pulmonary disorders, infectious pulmonary disease, pulmonary vascular disease, pulmonary pathology due to trauma, neonatal cardiopulmonary disease, and pediatric pulmonary disease. Prerequisite: RTH 206.
RP HLT SCI	RTH	208	PERINAT/PEDATRC RESP	2	Examines respiratory physiology and pathophysiology relevant to the newborn and pediatric patient. The principles, techniques, and equipment relied upon in providing respiratory care to this age group are identified and demonstrated. Prerequisite: RTH 102.
FOR LANG	RUS	101	INTRO RUSSIAN I	3	Oral alphabet drill, written alphabet drill, study of specific letters and sounds, pronunciation and orthography, personal pronouns, present tense, first conjugation verbs, accusative of personal pronoun questions, indirect questions and negation, present tense, second conjugation verbs, reflexive verbs, gender of nouns, Russian expression for TO HAVE, accusative of nouns (direct objects), verbs of going, months and years with numbers, prepositional case of nouns, possessive pronouns/adjectives. Prerequisite: proven foreign language ability.
FOR LANG	RUS	102	INTRO RUSSIAN II	3	Dative case of pronouns, double negatives, conjunctions. Noun plurals, stress shift in plurals, geographical information, expressions with dative, demonstrative pronouns, adjectives, superlative degree, past tense, future tense, accusative of adjectives/possessive pronouns, relative pronouns, partitive genitive, instrumental case with prepositions. Prerequisite: proven foreign language ability.
FOR LANG	RUS	201	INTERM RUSSIAN I	3	The perfective and imperfective aspect of verbs, dates and the negative case, dative case of nouns, adjectives and pronouns, instrumental case without prepositions, relative pronouns, partitive genitive, passive voice, instrumental case with prepositions, masculine nouns with stressed endings, genitive plural, adjectives modified by numbers, dative, instrumental and prepositional plural, indefinite pronouns, adjectives and adverbs, comparative degree of adjectives and adverbs, reading of simple texts. Prerequisite: RUS 101 and 102 or equivalent.
FOR LANG	RUS	202	INTERM RUSSIAN II	3	Conditional, subjunctive mood, verbs of going, running, taking, bringing, carrying, leading, prefixed verbs of motion, additional information about perfective/imperfective verbs, verbal adverbs, declension of last names, participles: present active, past active, present passive, past passive, review of semesters and previous grammar, further reading of simple Russian texts. Prerequisite: RUS 101 and 102 or equivalent.

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
FOR LANG	RUS	370	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	371	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	372	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	373	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	374	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	RUS	375	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	376	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	377	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	378	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	RUS	379	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	RUS	380	FOREIGN STUDY	0	Open to students who wish to study Russian abroad. Plans for foreign study should be presented at least two semesters prior to departure. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Rus 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
SSW/ANTHRO SOC		101	INTRO TO SOCIOLOGY	3	Introduction to the basic concepts, premises, and techniques involved in the scientific approach to the study of human societies. Analysis is made of selected aspects of social behavior at interpersonal, intergroup, and societal levels of contemporary American society. >
SSW/ANTHRO SOC		121	CONTEMP SOC PROBS	3	Survey of social problems confronting American society today. Special attention is given to variant theoretical and social policy approaches to social problems. >
SSW/ANTHRO SOC		200	AMERICAN MINORITIES	3	An investigation of the individual and group processes by which the United States has been peopled and of the resulting racial, religious, and ethnic communities. Consideration will be given to the similarities and differences in the values and experiences of a variety of groups and to the relative strength of tendencies toward assimilation and toward preservation of distinguishing characteristics. Prerequisite: Anh 101 or Soc 101. >
SSW/ANTHRO SOC		203	TELEPHONE SVY RESRCH	3	Provides training in applied social research. Students are directly involved in constructing an interview schedule, selecting a sample, conducting telephone interviews, coding and analyzing data, and writing a report. >
SSW/ANTHRO SOC		213	LIBRARY RSRCH SOC SC	1	Provides a thorough background in library research sources and techniques relevant to the needs of Soc/Anth, SWK, and CJA majors. Prerequisite: sophomore standing. >
SSW/ANTHRO SOC		232	AMERICAN FAMILY SYS	3	Examines the family throughout the life cycle. Focus is on the life styles of contemporary families, the influence of values upon family life, and issues affecting individuals and families. >>
SSW/ANTHRO SOC		301	ORGANIZATIONAL BEHAV	3	Examines the social dimensions of work organizations including formal and informal interaction patterns, leadership, and organizational culture. Prerequisite: Anh 101 or Soc 101. >
SSW/ANTHRO SOC		302	COMMUNITY	3	Examines the various types of communities as social systems. Special attention is given to total institutions. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SSW/ANTHRO	SOC	304	PUBLIC OPINION	3	Analysis of the role of public opinion in the political system. Examines the process by which political opinions are formed, communicated, and influence political behavior. Designs and administers a survey to measure political opinions. Prerequisite: Soc 101. >
SSW/ANTHRO	SOC	305	SOC OF RELIGION	3	Analysis of the interrelationships between religion and other aspects of society particularly with reference to the problems of order and change. Prerequisite:Soc 101; Anh 101 desirable. >
SSW/ANTHRO	SOC	306	INTERRACIAL SEMINAR	3	Examination of personal and institutional aspects of interracial relationships. Emphasis is on participative exploration through the use of controlled observations, simulations, role playing, and similar techniques. >
SSW/ANTHRO	SOC	307	SOCIAL RESEARCH I	3	An introduction to the logic and techniques of the social research process. Special attention is given to construction of questions, mailed questionnaires, and interviewing techniques. Prerequisite: Soc 101. >
SSW/ANTHRO	SOC	308	SOCIAL RESEARCH II	3	Techniques and procedures for processing social science data. Ability to develop and evaluate research reports and to judge how findings may be applied to improve social work practices are primary goals of the course. Previous training in statistics strongly recommended. >
SSW/ANTHRO	SOC	321	FUTURISTIC SOCIETY	3	An investigation of the social impact of technological and social innovations. Special attention is given to the construction of scenarios. >
SSW/ANTHRO	SOC	322	SOCIOLOGY OF AGING	3	Analyzes the influence of social interaction upon the process, stages, and problems of aging, particularly of older age. Student-conducted oral history is utilized not only as a catalyst for intergenerational understanding and respect, but also as a therapeutic social work technique designed to enhance the self-image of older people by having them look back over their personal histories and by means of that process helping them to meet the human need to attain a self-appreciation of the validity and significance of their lives. Dual listed with 522. >
SSW/ANTHRO	SOC	340	DOCUMENTARY PHOTO	3	Explores social relations with the camera. Examines the use of photographs as tools of inquiry, documentation, and data for social analysis. Studies problems related to cultural features affecting visual perception and reportage. >
SSW/ANTHRO	SOC	350	CHANGE TOPIC	0	Review of a specialty area in anthropology, sociology or the study of a problem from an interdisciplinary position. Prerequisite: upper division standing and permission of instructor. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SSW/ANTHRO	SOC	351	POPULATION ECOLOGY	3	Examines the spatial aspects of world population, numbers, densities, and qualities. Emphasizes the economic and social characteristics and mobility of the worlds population. Prerequisite: Soc 101. >
SSW/ANTHRO	SOC	355	CHANGE TOPIC	0	change topic >
SSW/ANTHRO	SOC	410	SOC/ANTHRO THEORY	3	Examines the basic sociological and anthropological theories. Initial focus is on classic theories, emphasis then is on contemporary theories. Functionalist, conflict, and interactionist theories are reviewed. Prerequisite: Anh 101, Soc 101, one other course in Anthropology or Sociology and upper division standing. >
SSW/ANTHRO	SOC	412	RURAL FIELD STUDY	3	Intensive examination of a social setting. Focuses on discerning patterns in social behavior and on imparting a sociocultural understanding. Prerequisite: six credits in anthropology and sociology and/or permission of instructor. >
SSW/ANTHRO	SOC	415	AM VALUE IN CONFLICT	3	Analyzes American values and values conflicts from a sociological perspective, placing such values and conflicts within a context of ideological orientation, ethnic/racial and social class diversity, group interaction, socio-cultural change, and societal policy. >
SSW/ANTHRO	SOC	421	URBAN SOCIETY	3	Intensive study of the social structure of urban communities. Primary focus is on dominant institutional features and problems of social integration and change. Prerequisite: six credits in anthropology or sociology and/or permission of instructor; Soc 302 desirable. >
SSW/ANTHRO	SOC	430	SOC OF DEVIANCE	3	An introduction to sociological theories of deviance and the new perspectives in criminology. Explores community and social bases of juvenile delinquency and crime. Prerequisite: six credits in sociology or permission of instructor. Dual listed with 530. >
SSW/ANTHRO	SOC	441	ORGANIZATN INTERNSHP	6	Provides experience in the regular activities of a business, government agency, or social service organization. Students will prepare an analysis of the organizations role system and its real or potential area of stress. Prerequisite: permission of instructor, Soc 301 strongly recommended. >
SSW/ANTHRO	SOC	460	SOC OF HLTH&MEDICINE	3	Review of research and social issues bearing on health and medical practice in American society. Aspects covered include cross-cultural and social class comparisons, sick roles, professionalization process, hospital organization, ideological issues, and public opinion. >
SSW/ANTHRO	SOC	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
FOR LANG	SPA	101	INTRO SPANISH I	3	For students who have not previously studied Spanish. Fundamentals of grammar, intensive drill in pronunciation, comprehension, and speaking. Two hours language laboratory required weekly. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	SPA	102	INTRO SPANISH II	3	Continuation of SPA 101. Two hour language laboratory weekly. Prerequisite: Spa 101 or equivalent.
FOR LANG	SPA	201	INTERM SPANISH I	3	Grammar review. Continuation of SPA 102. Prerequisite: SPA 102 or equivalent.
FOR LANG	SPA	202	INTERM SPANISH II	3	Continuation of SPA 201. Prerequisite: SPA 201 or equivalent.
FOR LANG	SPA	205	PRONUN & PHONETICS	1	Analysis of Spanish phonetics. Emphasizes oral drills for English-speakers seeking to acquire Spanish accent. Prerequisite: SPA 102.
FOR LANG	SPA	300	SPANISH CONVERSATION	3	Practice in oral self-expression and comprehension. Selected topics assigned for each class. May be taken concurrently with SPA 202 with permission of instructor. Prerequisite: Spa 201 or equivalent.
FOR LANG	SPA	305	SPAN CONVERSATN&COMP	3	Intensive study of idiomatic Spanish. Class is conducted in Spanish. Prerequisite: Spa 202.
FOR LANG	SPA	306	CULTURE&CIV OF SPAIN	3	Examines the history of customs and institutions of Spain. Emphasizes the effect of history on general culture and customs of present-day Spain. Prerequisite: Spa 202 or equivalent.
FOR LANG	SPA	307	CULTUR&CIV LATIN AM	3	Studies the history, customs and politics of Latin America. Emphasizes general characteristics: race, religion, life style, etc. Prerequisite: SPA 202 or equivalent.
FOR LANG	SPA	320	ADV SPAN STRUCTURE	3	Study and application of Spanish structural patterns; emphasizes syntax. Prerequisite: SPA 202 or equivalent.
FOR LANG	SPA	330	SVY SPANISH LIT I	3	Examines the most important writers of Spain through 17th century; attention given to literary movements, historical backgrounds, style and form. Prerequisite: Spa 210 or 211 or equivalent.
FOR LANG	SPA	331	SVY SPANISH LIT II	3	Continuation of SPA 330. Prerequisite: SPA 330 or equivalent.
FOR LANG	SPA	340	SPANISH-AMER LIT I	3	Examines the major Spanish-American writers and movements through Realism and Naturalism. Prerequisite: Spa 202 or equivalent.
FOR LANG	SPA	341	SPANISH-AMER LIT II	3	Continuation of SPA 340 from Modernism to the present. Prerequisite: SPA 340 or equivalent.

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	SPA	370	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	371	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	372	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	373	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	374	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
FOR LANG	SPA	375	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	376	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	377	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	378	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	379	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
FOR LANG	SPA	380	FOREIGN STUDY	0	Open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spa 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study abroad available in the Office of the Provost and Vice President for Academic Affairs. >
FOR LANG	SPA	400	SENIOR SEMINAR	0	Selected topics in Spanish and Latin American Literature. May be repeated for credit. >
FOR LANG	SPA	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
SPECIAL ED	SPE	101	EXCEPT PERSON IN SOC	3	Examines the nature and need of persons who are exceptional in emotional, social, physical, and intellectual development, including the gifted and talented. Discussions will include career opportunities, social issues, current trends in Special Education, rehabilitation and related settings. Observation in Special Education settings will be available. >
SPECIAL ED	SPE	201	MNTL & PHYS HANDCPD	3	Introduction to etiology, characteristics, education, management, and laws pertaining to children and adults with mental and physical handicaps. Prerequisite: Spe 101 or permission of instructor. >
SPECIAL ED	SPE	301	CURRIC DEV & ADJUST	3	Examines curriculum development, adjustments, methods, and materials in Special Education. Studies IEP goals, school organization, grouping, planning unit instruction, teaching-learning process, evaluating pupil progress, and parent and other agency relationships. Prerequisite: Spe 201 or permission of instructor. >
SPECIAL ED	SPE	302	ASSESSMENT	3	Provides students with the skills necessary to diagnose and correct learning problems. Special attention is given to considerations related to the selection of appropriate formal tests (e.g., test bias). Selective diagnostic instruments are examined. Prerequisite: SPE 201 or permission of instructor. >
SPECIAL ED	SPE	303	OBSERV & PARTICIPATN	3	Observation and participation in classroom setting. Emphasizing teaching/learning process, selecting, organizing, and presenting lessons and materials. Projects and demonstrations required. >
SPECIAL ED	SPE	304	PRAC ART FOR EXCP PR	3	Provides experience in test analysis and skill sequencing with emphasis of foods, woodworking, sewing, and related homemaking skills. Prerequisite: Permission of instructor. >
SPECIAL ED	SPE	310	COMMUN DISORDERS	3	Introduction to the nature of specific speech, hearing and language disorders. >

DEPARTMENT PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SPECIAL ED SPE	320	GIFTED AND TALENTED	3	Considers the characteristics of the gifted and talented. Introduces teaching procedures, program types, curriculum materials, and research. >
SPECIAL ED SPE	321	METHODS FOR GIFTED	3	Examines curriculum, methods, materials, and resources in the education of the gifted and talented. Includes analysis and demonstration of leading materials and strategies. Case studies, field visits, and teaching simulations are provided. Prerequisite: permission of instructor. >
SPECIAL ED SPE	330	CULT DIVERSITY SPED	3	Studies the definitions, causes, characteristics, and education of children and youth from multicultural environments. Considers problems in social-psychological context with implications for programs of improvement and research. >
SPECIAL ED SPE	340	CHLD NEEDS EMTNL SUP	3	Examines the etiology of emotional disturbance with concentration on the characteristics, diagnostic procedures, therapy, educational strategies, instructional materials, and relevant research in relation to the education of emotionally disturbed children and youth. Includes observation and child study experience. >
SPECIAL ED SPE	345	BEHAVIOR MANAGEMENT	3	Studies the implications of behavior theory as classroom teaching techniques. Conditioning of both academic skills and non-academic behaviors on an individual and group is stressed. Direct experience in modifying the behavior of exceptional children will be arranged. >>
SPECIAL ED SPE	355	SELECTED TOPICS	3	Field experience and/or group project work on selected current problems and interest areas in the field of special education. Students work individually with the instructor and periodically report back to the class on projects. Prerequisite: permission of instructor. >
SPECIAL ED SPE	360	EXCEPT CHLD REG CLAS	3	Develops an understanding of the rationale and procedures for mainstreaming exceptional children. Examines legal and philosophical rationales and current developments in mainstreaming are discussed. Major mainstreaming models will be studied, including problems and issues relevant to each technique. >
SPECIAL ED SPE	375	RESIDN FACIL HANDCPD	3	Explores the many types of residential facilities, from institutions to independent living, used to house the handicapped. The exploration will include philosophies, regulations, policies, and standards applied to facilities. Client programming, staff training, and supportive community agency services will be examined. >
SPECIAL ED SPE	377	ADULT HANDICAPPED	3	Covers a broad range of handicaps in adulthood including physical, mental, learning disabilities, and emotional problems. Emphasis will be on current program trends, issues, services, research on adult learning and adjustment, and implications for the helping professions. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SPECIAL ED	SPE	391	EXCP PRSN US & EURO	3	Designed to provide a comparative study of the United States and Europe of the care, treatment, and rehabilitation of exceptional persons from birth through adulthood. Study involves contact with families of exceptional individuals and professionals providing services on both continents. >
SPECIAL ED	SPE	400	STUDENT TEACHING	**	(By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience under the supervision of master teachers in two different special classes in university established centers. Observations and conferences are scheduled by the departmental supervisor. Prerequisite: 2.5 QPA. >
SPECIAL ED	SPE	404	ERLY CHILD HANDICAP	3	Examines the nature, needs, and education of young handicapped children in infant-toddler, preschool, and primary programs. Emphasis will be on identification, multi-disciplinary educational planning, parent counseling, agencies, and services. Coverage will include special classes, resource rooms, and mainstream education including curriculum, methods, and materials plus the roles of other professionals. Observations and child studies are required. Prerequisite: permission of instructor. >
SPECIAL ED	SPE	410	PROFESSIONAL SEMINAR	3	Designed to develop and refine the professional competencies of the special education major prior to the field experience and/or accepting a professional position. Coverage includes general orientation to the profession, current issues, school organization and administration, techniques for seeking a professional position, the scope of the field of special education, and professional responsibilities. >
SPECIAL ED	SPE	430	TECHNOLOGY IN SP ED	3	Introduction to and overview of the possibilities provided by microcomputers in assisting the exceptional learner. Provides initial skill and knowledge in using the microcomputer. Exposure will be made to available resources, selection and evaluation of course ware, adaptive devices, curriculum, correlation, and classroom integration. Dual listed with 530. >
SPECIAL ED	SPE	435	METHODS I	3	Provides organizational procedures, curriculum practices, methods and techniques used in educating mildly handicapped students k-12 in need of academic learning support. Emphasis is placed on direct teaching, collaborative practices, transitional planning, and curriculum adaptation. Prerequisite: Spe 101 and 301. >
SPECIAL ED	SPE	440	METHODS II	3	Study of the nature and needs of school age children with moderate and severe handicapping conditions that include cognitive, health and/or physical impairments. The course will focus on the educational and vocational needs of these children from a content base which includes identification, assessment, and remediation practices which are coupled with supportive measures, materials, and techniques. The use of instructional adaptations such as assistive technology will be stressed. Prerequisite: Spe 101 and 301. Dual listed SpE 508 >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
SPECIAL ED	SPE	450	INTERNSHIP	**	A supervised field experience in a professional setting serving the handicapped. >
SPECIAL ED	SPE	476	NORMALIZ & COMM RELA	3	Explores the principles of normalization and their application, community attitudes towards the handicapped, litigation and legislation, and strategies for public relations for the handicapped. Course will emphasize the PASS/PASSING evaluation. >
SPECIAL ED	SPE	480	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	481	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	482	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	483	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	484	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	485	SPECIAL ED WORKSHOP	0	Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of special education. >
SPECIAL ED	SPE	490	LEARNING DISABILITIES	3	Introduction to the definition, identification, etiology, and epidemiology of learning disabilities with a particular emphasis on methods of differential diagnosis and educational procedure. Remediation strategies, classroom management, and research will be studied. >
SPECIAL ED	SPE	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
SSW/ANTHRO	SWK	101	HUMAN SERVICES	3	Introduction to the various professional roles, delivery systems, and agencies in human services. Emergent issues, needs, and trends affecting both public and private sectors will be reviewed. >
SSW/ANTHRO	SWK	200	HUM BEHAV & SOC ENV	3	Focuses on selected and current cultural, sociological, economic, and biological factors that have an impact on the growth and development of the individual organism. Examines the interrelationship of social, cultural, subcultural small groups, and situational factors that influence social development. >
SSW/ANTHRO	SWK	241	INTRO TO SOCIAL WORK	3	Analysis of welfare activities as a social movement and of the dominant characteristics of the social welfare institution in America. Attention is given to changing ideologies and to the professionalization of social work practice. Prerequisite: Soc 101; Soc 121 desirable. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SSW/ANTHRO	SWK	257	SWK PROGRAM ORIENT	1	Acquaints students with the demands of professions in social work education. Examines expected educational outcomes of the social work program in relationship to the required curriculum designed to prepare social work generalists for the beginning social work practice. >
SSW/ANTHRO	SWK	258	SOC WRKR PROF RESPON	1	Acquaints students with the organization of the profession of social work, ethics of the profession as expressed by the National Association of Social Workers, established standards of practice, and public policy statements and objectives. >
SSW/ANTHRO	SWK	259	CURRENT PROF ISSUES	1	Acquaints the student with the major current issues that affect the delivery of social services to vulnerable populations. >
SSW/ANTHRO	SWK	308	EVALUATION RESEARCH	3	A systematic approach to assessing community social needs and evaluating social work programs and practice outcomes. >
SSW/ANTHRO	SWK	315	EVOL OF SOC WELFARE	3	Analyzes the socio-economic experience of America's "Have Nots," ideological views of misfortune, social welfare policy and politics, and the evolution of social work. >
SSW/ANTHRO	SWK	350	SWK MTD:SMALL GROUPS	3	Examines methods of facilitating group development and group interaction that enhances attempts to solve problems faced by the group and individual members of the group. Prerequisite: SWK 200 and 241. >
SSW/ANTHRO	SWK	351	SWK MTDS:ORGANIZATNS	3	Examines social work methods of assessing organizations to identify needs, establish goals for change, and enable the organization to change so as to benefit the individuals, families, and groups that are impacted by it. Prerequisite: SWK 200 and 241. >
SSW/ANTHRO	SWK	352	SWK MTDS:FAMILIES	3	A basic orientation to social work methods used to assist families to achieve their own goals. A systems approach to analyzing and assisting families is emphasized. Prerequisite: SWK 200 and 241 or permission of instructor. Dual listed 552. >
SSW/ANTHRO	SWK	353	SWK MTDS:INDIVIDUALS	3	Examines methods of assisting individuals by employing social work problem-solving strategies designed to enhance social functioning and relieve stress created by adverse social conditions. Prerequisite: Soc 121 and SWK 241. >
SSW/ANTHRO	SWK	354	CHEM DEPEND TREATMNT	3	Prepares students for entry-level positions in the chemical dependency field. Analyzes global assessment strategy for differential diagnosis, as well as, beginning intervention techniques with the chemically dependent. Prerequisite: junior standing or documentation of work in a chemical dependency field. >
SSW/ANTHRO	SWK	452	SWK FIELD PLACEMENT	**	Provides on-the-job study and skill training in a recognized social service agency providing services to various consumer groups. Designed to provide for the application of theory to helping processes with persons in need. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
SSW/ANTHRO	SWK	453	SENIOR SEMINAR	3	Designed to prepare the graduating social worker to participate actively in the process of supervision used by professional social workers. Students will actively participate in a helping relationship during the semester. >
SSW/ANTHRO	SWK	454	EMPLOYMENT COUNSELNG	3	Introduction to the field of employment services. Examines techniques involved in assessing individual skills and job requirements, as well as, sources of manpower information and forecasting. Covers theories of job selection and career development. Attention is given to the special problems of individuals undergoing retraining or rehabilitation, physically handicapped, and those having limited skills potential. >
SSW/ANTHRO	SWK	457	INTERNATIONAL SWK	3	Provides an international perspective for examining the values, concepts, and practices of the social work profession. Introduces knowledge of the cultural, social, economic, and political forces that constitute international communities out of which social problems emerge and from which must be drawn resources for providing social services and solving problems. >
SSW/ANTHRO	SWK	497	INDEPENDENT STUDY	0	(see description in section of academic policies.) >
COMM&THTRE	THT	110	INTRO TO THEATRE	3	Survey of drama and the art and craft of the theatre. Content doesn't necessarily include practice in applied theatre. >>
COMM&THTRE	THT	210	STAGECRAFT	3	Examines principles, procedures, and techniques of theatrical production including: background organization and planning, construction, painting, rigging, and operation of scenic elements, and the use and operation of lighting equipment. The laboratories are connected with the departments productions. >
COMM&THTRE	THT	212	FUND OF ACTING I	3	Introduces basic techniques and methods of acting. Designed for the beginning actor. No previous acting experience is necessary. >
COMM&THTRE	THT	213	FUND OF ACTING II	3	Continuation of Tht 212. Emphasis is on scene study, rehearsal, and performance techniques. Prerequisite: Tht 212 and permission of instructor. >
COMM&THTRE	THT	214	MAKE-UP	3	Designed to familiarize the student with the basic principles and technique of stage make-up, the various types of make-up and how to apply it in order to enhance a dramatic characterization. >
COMM&THTRE	THT	215	SVY THEATRE HST I	3	The development of the theatre from its primitive origins to the 19th century. >
COMM&THTRE	THT	216	SVY THEATRE HST II	3	The development of the theatre from the 19th century to recent movements in the 20th century. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
COMM&THTRE	THT	300	ADVANCED ACTING I	3	Advanced course in the methods and presentations of acting styles, from the ancient Greeks to Shakespeare. Particular emphasis will be placed on performance. Prerequisite: Tht 212 and 213. >
COMM&THTRE	THT	301	ADVANCED ACTING II	3	Continuation of Tht 300. Covers Restoration to the Modern Theatre. >
COMM&THTRE	THT	310	FUND OF DIRECTING	3	Basic principles and procedures of directing a play. Includes directing of workshop scenes and a one-act play presented to a public audience. Prerequisite: Tht 210, 212, 215, 216 and permission of instructor. >
COMM&THTRE	THT	312	STAGE LIGHTING	3	The history and basic techniques of lighting for the stage. Lighting designs and control are stressed. Includes participation in lighting major productions. Prerequisite: Tht 210. >
COMM&THTRE	THT	313	SCENE DESIGN	3	Study and practice in the principles and techniques of scenic design in the modern theatre. Emphasis is on knowledge and sense of the theatre and the relationship of the contribution of the scenic designer with those of the actor, director, and playwright. Prerequisite: Tht 210, 317 or permission of instructor. >
COMM&THTRE	THT	315	SCENE PTG&ADV STGCRF	3	Training in the techniques and practices of contemporary scenic arts. Laboratory time will allow the student to demonstrate a proficiency of the techniques studied. >
COMM&THTRE	THT	316	THEATRE & STAGE MGMT	3	Fundamental aspects of management designed for the serious student of theatre. Provides concentrated experiences in major college productions as well as responsibilities in box-office and publicity. >
COMM&THTRE	THT	317	DRAFT & SCENIC RENDR	3	A study of techniques and conventions of drafting and full color rendering for the theatre technician-designer. Prerequisite: Tht 210. >
COMM&THTRE	THT	318	ADVANCED LIGHTING	3	Investigation into contemporary practices, equipment, and procedures for lighting all types of theatrical and entertainment events. Includes projects in the field. Prerequisite: Tht 312. >
COMM&THTRE	THT	410	INTERNSHIP	6	Supervised and evaluated participation in varied settings provides practical application of theoretical principles. >
COMM&THTRE	THT	417	PLAY STRUCT & ONLY	3	Analysis of selected plays and their significance in the development of the dramatic form, including the study of the social and cultural conditions in which the playwright lived and worked. >
COMM&THTRE	THT	418	PLAYWRITING	3	Studies the principles and theories of dramatic structure. Practice in writing for the stage. Prerequisite: Tht 215, 261, 310, 417, and/or consent of instructor. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
COMM&THTRE	THT	450	CHANGE TOPIC	0	A project initiated by the student to increase his/her knowledge in an advanced area not offered as a regular class. Intensive study of a subject area under the guidance of a faculty member who has special expertise in that subject. Prerequisite: Permission of instructor. >
COMM&THTRE	THT	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
COMM&THTRE	THT	314	PLAY PRODUCTN PRACT	3	Concentrates on the various aspects of theatre production from script to performance. An intensive experience in theatrical production for public performance. Synthesis of acting, design, technical and managerial elements in total production with emphasis on "hands-on" experience. >
BUS ADM	TRT	102	INTRO TRAVEL-TOURISM	3	Surveys the broad nature of travel-tourism with an emphasis on the interrelationships between traveller need-desire and travel fulfillment. >
BUS ADM	TRT	300	THE TRAVEL CONSUMER	3	Provides students with a comprehensive understanding of the traveller-tourist characteristics, psychographics, and the external influences that impact on potential markets for travel-tourism products. >
BUS ADM	TRT	312	INTERNATIONL TOURISM	3	Studies the international tourist and the ramifications of such tourism to both sending and host countries. >
BUS ADM	TRT	410	TOP SEM IN TRAV-TOUR	3	Seminar topics vary to offer exposure to the multifaceted nature of travel-tourism. Topics include: the travel agency, wholesale tour development, issues in contemporary travel and tourism, and hospitality. >
BUS ADM	TRT	420	TRAVEL-TOUR PROJ SEM	3	Provides an opportunity to perform individual research, problem solving, and decision making in practical situations related to travel-tourism. >
BUS ADM	TRT	430	TOUR SUPLRS&WHOLESL	3	A comprehensive study of travel-tourism suppliers, especially accommodations, food services, and the ground operators followed by a study of the wholesale travel business including personal experience in package/tour development and marketing. >
BUS ADM	TRT	431	AGENCY CRUISE MGMT	3	Examines the structure, organization, and operation of a retail agency cruise department or cruise-only agency. >
BUS ADM	TRT	460	PASSENGER TRANSPORT	3	An analysis of spatial principles and transport systems and networks; including factors of route location, theories of interaction, and the role of all forms of passenger transport in the travel-tourism economy. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
BUS ADM	TRT	461	CRUISE PRODUCTS	3	Designed to acquaint students with the complexity and diversity of the cruise products available in the marketplace including equipment, corporate products and marketing philosophy, destinations, and markets. >
BUS ADM	TRT	480	CONTP ISSU TRAV&TOUR	3	Survey of contemporary issues that are faced by the travel and tourism industry. Students become familiar with the issues through intensive study of the popular and trade press. >
BUS ADM	TRT	494	INTERNSHIP	0	Provides an opportunity to apply skills and knowledge of travel-tourism under the supervision of professionals. Two individually designed projects are required. Prerequisite: permission of instructor. >
BUS ADM	TRT	497	INDEPENDENT STUDY	0	(See description in section on Academic Policies.) >
BUS ADM	TRT	322	TRAV-TOUR SITE DEVT	3	An analysis of natural/manmade tourism resources of value in travel tourism. The development of resources into viable facilities will be considered in the contexts of changing socioeconomic and political considerations. >
BUS ADM	TRT	320	N AMER DESTIN&ATTRA	3	Acquaints the student with North American and West Indian travel destinations, attractions, and attractiveness. Study of the marketing and promotion of these destinations. >
BUS ADM	TRT	321	WRLD-WIDE DEST&ATTRA	3	Acquaints the student with the world-wide travel destinations, attractions, and attractiveness. Study of the marketing and promotion of these destinations. >
ENGLISH	WS	410	CHANGE TOPIC	3	An in-depth examination of a topic in Women's Studies including women's contributions, knowledge, and perceptions taught from a cross-disciplinary, cross-cultural perspective in seminar style. This serves as the capstone course for the Women's Studies minor. Prerequisite: Eng 100, two other Women's Studies courses, and junior standing or permission of instructor. Cross-listed with Eng 320. >
RP HLT SCI	XRT	101	X-RAY TECHNOLOGY I	3	Introduction to radiology professional ethics and medical terminology. Students will begin evaluating radiographic images. >
RP HLT SCI	XRT	102	X-RAY TECHNOLOGY II	3	Basic introduction to imaging equipment and radiation protection methods. Students will learn examination considerations for the extremities, spine, shoulder girdle, pelvic girdle, and bony thorax, and continue to deal with the concept of patient care. Prerequisite: XRT 101. >
RP HLT SCI	XRT	103	X-RAY TECHNOLOGY III	5	Acquaints the student with the methods of x-ray film processing and principles of radiation biology and radiation protection. Emphasis will be placed on examinations of the cranium. Radiographic consideration of examinations using contrast media and film evaluation will be discussed. Prerequisite: XRT 102. >

DEPARTMENT	PREFIX	COURSE NUMBER	TITLE	CR	COURSE DESCRIPTION
RP HLT SCI XRT		104	X-RAY TECHNOLOGY IV	3	Studies the principles of radiographic exposure. Emphasis is placed on radiographic examinations of the urinary system and alimentary canal. Students will evaluate radiographic concepts. Prerequisite: XRT 103. >
RP HLT SCI XRT		105	X-RAY TECHNOLOGY V	3	Examines the radiographic aspects of human disease and pathology. Provides the basic concepts and techniques of radiologic quality assurance and continues to evaluate radiographic images. Prerequisite: XRT 104. >
RP HLT SCI XRT		106	X-RAY TECHNOLOGY VI	4	Reviews the knowledge and cognitive skills underlying the intelligent performance of the major tasks typically required of an entry-level radiographer. Students will learn the methodology of scientific technical reporting and evaluation. Prerequisite: XRT 105. >
RP HLT SCI XRT		203	X-RAY PHYSICS	3	Designed to introduce and provide background for the more technical aspect of radiological physics. Provides background for understanding the principles and practices of radiology, and an understanding of the electromagnetic spectrum. Prerequisite: Phy 165. >
RP HLT SCI XRT		301	CLINICAL PRACT I	2	Examines the proper use of modern diagnostic x-ray equipment. Provides a general orientation regarding hospital facilities and policies. Students will then perform, while under the direct supervision of a registered radiographer, examinations presented in XRT 102. Prerequisite: XRT 101. >
RP HLT SCI XRT		302	CLINICAL PRACT II	2	Students continue to practice the skills learned in XRT 301, and expand their clinical education into newer areas. They will perform, while under the direct supervision of a registered radiographer, examinations presented in courses XRT 102 and 103. Patient contact and responsibilities will increase in this course. Prerequisite: XRT 102 and 301. >
RP HLT SCI XRT		303	CLINICAL PRACT III	2	Provides more advanced examinations presented in XRT 103 and 104. Training in the modalities of Nuclear Medicine and Computerized Tomography will be provided with a two-week rotation through each area. Students will demonstrate traumatic examination skills in the Emergency Room X-Ray Department practicum. Prerequisite: XRT 103 and 302. >
RP HLT SCI XRT		304	CLINICAL PRACT IV	3	Students continue to perform radiographic examinations in the general diagnostic clinical area along with rotations through Special Procedure, MRI, Ultrasound, and Radiation Therapy. Assignments will be given involving the quality assurance testing of diagnostic x-ray equipment. Prerequisite: XRT 104 and 303. >

DEPARTMENT	PREFIX	NUMBER	COURSE TITLE	CR	COURSE DESCRIPTION
RP HLT SCI	XRT	305	CLINICAL PRACT V	2	Performance of radiographic examinations that are done by entry-level radiographers. Patient contact and responsibility will increase with examinations performed under indirect supervision. A clinical elective will be selected for further specialization in any area of radiology. Prerequisite: XRT 105 and 304.

